



**BENGALURU SOLID WASTE MANAGEMENT
LIMITED**



**Supply, Installation and Commissioning of Video wall,
UPS, Command Center Monitoring Software & DG Set
for Integrated command and control Center at Ground
Floor, BSWML premises**

**Office of the Deputy General Manager -2
Bengaluru Solid Waste Management Limited., 1st
Floor, BBMP Building, Thimmaiah Road, Vasanth
Nagar, Bengaluru - 560052**



Bengaluru Solid Waste



No: DGM-2/BSWML/TEND/04/2025-26

Date:06.05.2025

INVITATION FOR BIDS (IFT)
Short Term Bid Notification
(Only through GOK KPP Portal
Only)

1. The Deputy General Manager-2, Bengaluru Solid Waste Management Limited on behalf of the Managing Director, BSWML, Bengaluru, invites bids from eligible Bidders for the works detailed in the table below.
2. Tender documents may be downloaded from Government of Karnataka kpp website <https://kppp.karnataka.gov.in> under login for Contractors. The tender document can be downloaded in the portal as per prescribed date and time published in the portal. Only Interested Bidders who wish to participate should remit online transaction fee for tender after registering in the portal. The transaction fee is non-refundable if you wish to participate.
3. Other details can be seen in the tender document.

Sl No.	Name of the work	Approx. Amount put to Bid (Rs. in lakhs) Excluding GST	EMD (Amount in Rs.)	Cost of Bid Document	Stipulated completion period (including monsoon period)
1	Supply, Installation and Commissioning of Video wall, UPS, Command Center Monitoring Software & DG Set for Integrated command and control Center at Ground Floor, BSWML premises	998.42	Rs.1,00,000/- through e-payment under of the following i.e., online/ RTGS/ NEFT /OTC and the balance Rs.13,97,640/-by Bank Guarantee/FDR issued by Nationalized/ Scheduled Bank	As per KPP portal	2 Months

Calendar of events:

- Last date for uploading queries on KPP Portal up to 14.05.2025 at 15.00 Hrs.
- Pre-Bid Meeting on 15.05.2025 at 15.00 Hrs. at the office of The Chief Engineer & Chief General Manager (Tech), BSWML, BBMP Building, Thimmaiah Road, Vasanth Nagar, Bengaluru-560 052.
- Last Date for receipt of Tenders on 23.05.2025 up to 16.00 Hrs.
- Date of Opening of Technical bids are on 26.05.2025 after 16.30 Hrs. or next



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working day.

- Opening of Financial bids will be intimated to technically qualified bidders.

General Conditions:

1. Any reputed firms/ Manufacturers/ Suppliers/ Companies /Company registered under Companies Act 1956 are eligible to apply.
2. The Bengaluru Solid Waste Management Limited reserves the right to accept / reject any or all the Tenders without assigning any reasons
3. The Tender shall remain valid for 180 days from the last date of Submission of the tender.
4. The intending Suppliers are requested to note that they should abide by the detailed instructions and conditions contained in the Standard Tender documents.
5. GST shall be paid to the tendered amount separately to the successful bidder.
6. Before submission of online bids, bidders must ensure that scanned copies of all the necessary documents have been attached with bid.
7. All the required information required for bids must be filled and submit online.
8. For details, registration and e-payment visit GOK KPP portal website <https://kppp.karnataka.gov.in> or contact KPPP helpdesk.
9. Further details with respect to this tender can be obtained from the office of the undersigned on all working days between 10.00 A.M. & 5.00 P.M.
10. The Employer shall not be liable for any delays due to system failure beyond its control. Even though the system will attempt to notify the bidders of any tender updates, the Employer shall not be liable for any information not received by the bidders. It is the bidders responsibility to verify the KPP portal for the latest information related to the bids, E-mail address of the Helpdesk is hphelpdesk.blr@intarvo.com. KPP portal help desk telephone numbers are: 080- 22371090/22373788. The bidders is required to ensure browser capability of the computer well in advance to the last date and time for receipt of the bids. The employer shall not be responsible for non-accessibility of KPP portal due to internet connectivity issues and technical glitches.
11. Corrigendum/modification/corrections, if any, will be published in the KPP portal website only.

Sd/-

Deputy General Manager -2
Bengaluru Solid Waste



Copy Submitted to the:

1. Hon'ble Chairman, BSWML & ACS, UDD for kind information.
2. Hon'ble Managing Director BSWML/Chief Commissioner, BSWML for kind information.
3. Chief Executive Officer (BSWML)/Special Commissioner, BSWML for kind information.
4. Chief Operational Officer (BSWML), for kind information.
5. Chief Financial officer (BSWML)/CAO, BSWML for kind information.
6. Company Secretary, BSWML for kind necessary action.
7. Office Copy.

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DISCLAIMER

The information contained in this Request for Proposal document (the "RFP") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of Bengaluru Solid Waste Management Limited ("BSWML") or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their financial offers pursuant to this RFP (the "Financial Bid"). This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Assignment. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in the Bidding Documents may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bid Stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information,
Contra Page 8 of BSWML



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assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder or Service Provider, as the case may be, for the Assignment and the Authority reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery



fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.



SECTION I: INSTRUCTIONS TO BIDDERS

A. INTRODUCTION

Bruhat Bengaluru Mahanagara Palike (BBMP) is an Urban Local Body (ULB) which is responsible for the administration of the Bengaluru City region. BBMP is the fourth largest Municipal Corporation in India that is responsible for overall civic and infrastructural assets of Bengaluru. It is run by the city municipal council and represents the third level of government. BBMP serves an approximate area of 714 Sq. kms. and has an approximate population of 13 million and comprised of 8 zones with 225 wards.

Bengaluru generates about 5500 tons of Solid Waste daily excluding bulk waste. BBMP carries out collection, street sweeping, transportation, processing and disposal of Municipal Solid Waste from generators followed by door-to-door collection system for waste which is then sent to the respective processing facilities based on the stream. Reject and inert waste is sent to the landfill.

Bengaluru Solid Waste Management Limited has been formed by the government of Karnataka vide G.O. No. UDD 256 MNY 2020 Dated: 05.03.2021. The main objective for formation of the BSWML are as under:

1. To carry on the business, within jurisdiction of Bengaluru Urban District including jurisdiction of Bruhath Bengaluru Mahanagara Palike (BBMP), of collection, segregation, transportation, trading, processing, composting, recycling, treatment and disposal of all types of solid waste, including municipal solid waste, electronic waste (e-waste), construction and demolition debris, bio-medical waste, hazardous waste plastic waste etc., undertake use, sale, marketing and/or distribution of all products and by-products that are generated in the process of treatment or disposal of waste and waste products (such as compost, recycled aggregates, energy, segregated combustible fuel and refuse derived fuel generated from waste to energy processes such as bio-methanation etc., methane gas from landfill, processing, electronic products suitable for re-use with or without re-furbishing paper, metals and other materials including chemicals obtained from treatment of wastes) and to develop, construct, remediate, rehabilitate, operate and/or maintain/manage processing facilities for all types of waste and waste products including composting plants, landfills and sewage treatment plants, material recovery facilities, recycled aggregates plant, waste to energy plants, segregated combustible fuels, refuse derived fuel plants, electronic waste processing plants and to also undertake development, marketing, purchase, sale and/or trading of financial instruments that would enable the financing of waste collection, treatment or processing projects (including carbon emission receipts (CERS)) and any other related activities.



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2. To promote, own, acquire, construct, erect, maintain, improve, manage, operate, alter, carry on, control, take on lease, advise and render assistance in the construction, erection and maintenance, improvement or working of any industry, company, venture and system or scheme in the area of collection, transportation, processing and disposal of municipal waste, electronic waste, bio medical waste and hazardous waste by processes such as composting, bio-methanation, aerobic/anaerobic treatment,



waste to energy process including producing of refuse derived fuel and any other processes/technologies available.

B. CONTENTS OF BIDDING DOCUMENT

1. Scope of Bid

BSWML is intends to Monitor the Solid waste Management activities on real time basis. Hence the Integrated Command Control center is being set up for the purpose. The project is being taken on Phase manner. In phase-1 the civil structure and primary hard ware components and associated soft wares have been installed. Further in phase-2 principal components of the overall project (1 Location) to be taken up Supply, Installation and Commissioning of Videowall- Controller, Wall Management Software., UPS, Command Center Monitoring Software & DG Set for Integrated command and control Center at Ground Floor, BSWML premises.

The specification given in the Schedule is minimum requirement, the manufacturer/ suppliers should supply, installation and Commissioning for the above-mentioned scope of work along with technical specifications with good performance & durability. Considering the feed input & outcome as important criteria. The contractor will be responsible to maintain the cleanliness at the and the working(active) area only.

2. Payments

- 2.1.** Payments by the BSWML will be made in accordance with Section VI GCC clause 13 and will be subjected in all respects to the terms and conditions of the Agreement. No party other than the supplier shall derive any rights from the Agreement.

3. Corrupt and Fraudulent Practices

- 3.1.** The Government requires that Bidders/ Suppliers/ Contractors observe the highest standard of ethics during the procurement and execution of Government financed contracts. In pursuance of this policy, the Government:
- a. Defines for the purposes of this provision, the terms set forth as follows:
 - i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - ii. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government, and includes collusive practice among



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Bidders (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition;

- b. will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- c. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government-financed contract.

3.2. Minimum eligibility criteria for participation in the bids are:

Bidders should not be associated, or have associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Tenders.

4. Eligible Bidders

4.1. A Bidder may be any reputed firm/ Manufacturers/ Suppliers/ Companies/ /Company registered under Companies Act 1956 or any combination of them. with a formal intent to enter into an agreement. The Bidder/ authorized dealer/ supplier shall obtain authorization letter from the OEM specifying the name of the work as per Annexure.

4.2. BSWML considers a conflict of interest to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited practice under **Corrupt and Fraudulent Practices**. In pursuance of these bidders, suppliers, and contractors observe the highest standard of ethics. BSWML will take appropriate actions, if it determines that a conflict of interest has flawed the integrity of any procurement process. Consequently, all Bidders found to have a conflict of interest shall be disqualified.' A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:

- Have controlling shareholders in common; or
- Receive or have received any direct or indirect subsidy from any of



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them; or

- Have the same legal representative for purposes of this Bid; or
- Have a relationship with each other, directly or through common third parties, that puts them in position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of BSWML regarding this bidding process; or
- A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods and services that are the subject of the bid".

4.3. For purposes of this Clause, the term "goods" includes commodities, equipment, hardware ,software and "related services" includes services such as insurance, installation, commissioning .

4.4. If a Bidder that does not manufacture or produce the Goods it offers to supply, he shall submit the Manufacturer's Authorization to demonstrate that he has been duly authorized by the manufacturer or producer of the Goods to supply these Goods.

5. Clarification of Bidding Documents

5.1. A prospective Bidders requiring any clarification of the Bidding documents may write acquires and upload in the KPP Portal or communicate to the O/o The Deputy General Manager-2., BSWML, Vasanth Nagar, 1st floor, Bangalore. The Purchaser will respond to any request for clarification of the tender documents which it receives before Prebid meeting and same shall be uploaded in the KPP Portal.

5.2. BSWML is not responsible for the completeness of the Bidding Document and its addenda, if they were not issued directly from BSWML.

5.3. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.

6. Amendment of Tender documents

6.1. Before the deadline for submission of tenders, the BSWML may



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modify the bidding documents by issuing addendum.



6.2. Any addendum thus issued shall be part of the tender documents and shall be communicated through KPP Portal and will be binding on them.

6.3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their tenders, the BSWML shall extend as necessary the deadline for submission of tenders.

C. PREPARATION OF TENDERS

7. Cost of Bidding

7.1. The Bidders shall be accompanied by Bid processing fee for the specified amount mentioned in the KPP Portal. The supplier/manufacturer can pay the Bid processing fee in the KPP Portal using any of the following payment modes.

- Credit card
- Direct debit
- National Electronic Fund Transfer (NEFT)
- Over the counter (OTC)

7.2. For details, registration and e-payment, visit GOK KPP Portal website <https://kpp.karnataka.gov.in>

8. Language of Tender

8.1. The bid prepared by the Bidder as well as all correspondence and documents relating to the tender exchanged by the Bidder and the Purchaser, shall be in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Tender, the translation shall govern.

9. Documents Comprising the BID

9.1. The Bid shall comprise two envelopes submitted online simultaneously, one containing the requisite EMD as per ITB clause-20 and second containing Technical Proposal and the third Price bid (Online only), The bidder pay the EMD through e-payment under any one of the four options, through Credit card, direct debit, National Electronic Fund Transfer (NEFT), Over the Counter (OTC) and the confirmation receipt shall be submitted along with the tender. And, copy of

technical documents. Price Bid/ financial offer should be submitted



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online, in case of manual submission of Price Bid, it will be rejected.

- 9.2.** Technical Proposals will be opened online the specified address, date and time. The Price Proposals shall remain sealed and will be held in custody on online portal. The Technical Proposals will be evaluated. No amendments or changes to the Technical Proposals will be permitted once bid get validated online. Technical Proposals, which does not conform, to the specified requirements will be rejected as deficient Bids.
- 9.3.** Price Proposals of technically qualified Bidders will be opened online as per key dates at the specified date and time. The Price Proposals will be evaluated and the Contract will be awarded to the Bidder who's Bid has been determined to be the lowest evaluated substantially responsive Bid.
- 9.4.** The Technical Proposal shall contain the following:
- Technical Proposal Submission Sheet;
 - Written confirmation authorizing the signatory of the Bid.
 - Documentary evidence establishing the Bidder's eligibility to bid.
 - Documentary evidence that the Goods and Related Services conform to the Bidding Document;
 - Information in Appendix's of Technical proposal Submission Sheet
 - Documentary evidence establishing the Bidder's qualifications to perform the contract.
 - Manufacturer's authorization if applicable
 - Any other document required as per the Bid Data Sheet and Tender.
- 9.5.** The Price Proposal shall contain the following: Price Proposal Submission Sheet filled online only.

10. Bid Submission Sheets and Price Schedules

- 10.1.** The Bidder shall submit the Technical Proposal and the Price Proposal online using the appropriate Submission Sheets furnished in Bidding Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
- 10.2.** The Bidder shall submit, as part of the Price Proposal, the Price Schedules for Goods and Related Services, according to their origin as appropriate, using the forms furnished online



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11. Alternative Bids

11.1. Alternative bids not allowed.

12. Bid Prices

The prices quoted by the Bidder in the Price Proposal Submission Sheet and in the Price Schedules shall conform to the requirements specified below.

12.1. All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is substantially responsive, the corresponding adjustment shall be applied.

12.2. The price to be quoted in the Price Proposal Submission format including any discounts offered.

12.3. The price of the goods quoted should be on the basis of delivery at BSWML shall be Exclusive of GST & inclusive of all customs duties and taxes, Entry tax, transportation, packaging, transit insurance, RTO registration of vehicles, service tax, sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of goods quoted.

12.4. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected.

13. Currencies of Bid

Bid prices shall be quoted in the Indian Rupees.

14. Documents Establishing the Eligibility of the Bidder

14.1. To establish their eligibility Bidders shall:

- a. Complete the eligibility documents as required.

15. Documents Establishing the Eligibility of Goods and Related Services

15.1. To establish the eligibility of the Goods and Related Services, Bidders shall complete declarations in the Price Schedule Forms.

16. Documents Establishing the Conformity of the Goods to the Bidding Document



16.1. To establish the conformity of the Goods and Related Services to the Bidding Document, the Bidder shall furnish as part of its Technical Proposal the documentary evidences.

16.2. The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to those requirements.

16.3. Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by Bidder in the Schedule of Supply, are intended to be descriptive only and not restrictive.

17. Documents Establishing the Qualifications of the Bidder

17.1. To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the evidence indicated for each qualification criteria specified in Evaluation and Qualification Criteria.

18. Period of Validity of Bids

18.1. Bids shall remain valid for the period of 180 days after the bid submission deadline date prescribed by BSWML. A Bid valid for a shorter period shall be rejected by BSWML as non-responsive.

18.2. In exceptional circumstances, prior to the expiration of the bid validity period, BSWML may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If validity of their Bids is extended the Earnest Money Deposit (EMD) shall also be extended for a corresponding-period. A-Bidder may refuse the request without forfeiting its Earnest Money Deposit (EMD). A Bidder granting the request shall not be required or permitted to modify its Bid.

19. Earnest money deposit (EMD)

19.1. The Tenderer shall furnish, as part of his tender, Earnest Money Deposit (EMD) in the amount as mentioned in IFT for this particular Work. Further, out of the total EMD Amount only Rs. 1.00 Lakh (Rupees One Lakh only) shall be paid in the KPP portal using any of the following modes and the Balance Amount shall be in the form of Bank Guarantee from any Bank.

- Credit Card.
- Direct Debit.
- National Electronic Fund Transfer (NEFT).
- Real Time Gross Settlement (RTGS).
- Over the counter (OTC) Challan.



20. Format and signing of Tender

20.1. All pages of the Bid shall be signed or initialed by the person authorized signing the Bid. Bidder has to scan these original documents and upload at appropriate place on the online portal.

20.2. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. SUBMISSION AND OPENING OF BIDS

21. Sealing and Marking of Bids

21.1. "Technical proposal, EMD submission details along with full EMD requisites" should be submitted online and "Price Proposal" should be submitted online only.

22. Deadline for Submission of Bids

22.1. Bids must be uploaded no later than the date and time indicated in online notice at the online portal.

22.2. BSWML may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document as addenda, in which case all rights and obligations of BSWML and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

23.1. Online portal shall not allow the bidder to bid after the specified time and hence bidders should take extra care of the timings of the bid submission.

24. Withdrawal, Substitution, and Modification of Bids

24.1. On the online portal bidders are allowed to withdraw, substitute, or modify its Bid before the final submission time. A Bidder will not be allowed to withdraw, substitute, or modify its Bid after the scheduled submission time.

25. Bid Opening

25.1. The technical proposal will be opened online as per schedule time and date and Price proposal of only technically qualified bidders shall be opened online.

25.2. Price proposals will be opened online only.

E. EVALUATION AND COMPARISON OF BIDS

26. Confidentiality



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26.1. Information relating to the examination, evaluation, comparison, and post qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.

26.2. Any attempt by a Bidder to influence BSWML in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions may result in the rejection of its Bid.

27. Clarification of Bids

27.1. To assist in the examination, evaluation, comparison and post-qualification of the Bids, BSWML may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by BSWML shall not be considered. BSWML request for clarification and the response shall be in writing or through e-mail. No change in the prices or substance of the Bid shall be sought, offered, or permitted.

28. Responsiveness of Technical Proposal

28.1. BSWML determination of the responsiveness of a Technical Proposal is to be based on the contents of the Technical Proposal itself.

28.2. A substantially responsive Technical Proposal is one that conforms to all the terms, conditions, and specifications of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

- a. Affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
- b. Limits in any substantial way, inconsistent with the Bidding Document, BSWML rights or the Bidder's obligations under the Contract; or
- c. If rectified would unfairly affect the competitive position of other Bidders presenting
- d. Substantially responsive Technical Proposals

29. Nonconformities, Errors, and Omissions

29.1. Provided that a Technical Proposal is substantially responsive, BSWML may request that the Bidder submit the necessary information or documentation, within a reasonable of Price Proposals on the following basis:



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- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the individual item rate shall prevail and the total shall be corrected.
- If there is a discrepancy between words and figures, the amount in words shall prevail.

30. Preliminary Examination of Bids

30.1. BSWML shall examine the Technical Proposal to confirm that all documents and technical documentation requested have been uploaded on online portal, and to determine the completeness of each document submitted.

30.2. BSWML shall confirm that the following documents and information have been provided in the Technical Proposal. If any of these documents or information is missing in the uploaded documents on the online portal, the offer shall be rejected.

- Technical Proposal Submission Sheet.
- Written confirmation of authorization to commit the bidder.
- Earnest Money Deposit (EMD).
- Manufacturer's Authorization, if applicable.

31. Examination of Terms and Conditions; Technical Evaluation

31.1. BSWML shall examine the Bids to confirm that all terms and conditions specified in Bid Document have been accepted by the Bidder without any material deviation or reservation.

31.2. BSWML shall evaluate the technical aspects of the Bid submitted in accordance to confirm that all requirements specified in Schedule of Supply of the Bidding Document have been met without any material deviation or reservation.

31.3. If, after the examination of the terms and conditions and the technical evaluation, BSWML determines that the Technical Proposal is not substantially responsive it shall reject the Bid.

31.4. If, after the examination of the terms and conditions and the technical evaluation, BSWML may reject the bid

- If any false representation of documents or misleading information is submitted by the bidder.
- Any record of poor performance such as abandoning the



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work, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

32. Right to Accept Any Bid, and to reject any or All Bids

32.1. BSWML reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.

F. AWARD OF CONTRACT

33. Award Criteria

33.1. BSWML shall award the Contract to the Bidder whose offer has been determined to be the lowest Bid and is substantially responsive to the Bidding Document, provided further that the Bidder has remained qualified to perform the Contract satisfactorily.

34. Right to Vary Quantities at Time of Award

34.1. At the time the Contract is awarded, BSWML reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Bid document with the approval of the Board, provided this does not exceed the 25 percentage, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Document.

35. Notification of Award

35.1. Prior to the expiration of the period of bid validity, BSWML shall notify the successful Bidder, in writing, that its Bid has been accepted.

35.2. Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.

36. Signing of Contract

36.1. Promptly after notification, BSWML shall send to the successful Bidder the Agreement.

36.2. Within fifteen (15) days of receipt of the Agreement, the successful Bidder shall sign and return it to BSWML.

37. Performance Security



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37.1. Within thirty (30) days of the receipt of notification of award from BSWML, the successful Bidder shall furnish the Performance Security equal to 5% of the total capital cost in the form of Bank guarantee. The Performance security on capital cost to be valid for a period of one year/ DLP/ warranty period.

37.2. Failure of the successful Bidder to submit the Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Earnest Money Deposit (EMD). In that event BSWML may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by BSWML to be qualified to perform the Contract satisfactorily.

38. Advance Payment and Security:

38.1. The Employer will provide a Mobilization advance of 5% on the Capital cost against Bank Guarantee (The advance payment will be paid to the Contractor no later than 30 days after fulfillment of the above condition).

SECTION II - BID DATA SHEET (BDS)

A. INTRODUCTION	
1.	The Deputy General Manager - 2, on behalf of Managing Director, BSWML hereby invites sealed bids from competent bidders for Supply, Installation and Commissioning of Video wall, UPS, Command Center Monitoring Software & DG Set for Integrated command and control Center at Ground Floor, BSWML premises
B. BIDDING DOCUMENT	
2.	All correspondence, collection and submission of Bidding document is to be made to the O/o The Deputy General Manager -2, BSWML.
	Clarification may be obtained prior the Prebid meeting as per the schedule
C. PREPARATION OF BIDS	



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3.	The language of the Bid is English. Response to the bids in English
4.	Alternative Bids are not permitted
5.	The prices quoted by the Bidder shall be: fixed
6.	The currency of the Bid shall be: Indian rupees.
7.	The bid validity period shall be 90 days.
8.	Bidder may contact the officials at BSWML to get any other information about the equipment's, Hardware and Software required
D. SUBMISSION AND OPENING OF BIDS	
9.	Only one Bid is to be submitted by each bidder. Technical and financial bid should be submitted online.
10.	The written confirmation of Authorization of manufacturer to sign.
E. EVALUATION, AND COMPARISON OF BIDS	
11.	Bidders are allowed to quote price in Indian Rupees only.
F. AWARD OF CONTRACT	
12.	BSWML shall award the Contract to the Bidder whose offer has been determined to be the lowest and is substantially responsive to the Bidding Document.



SECTION III - EVALUATION AND QUALIFICATION CRITERIA

This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser may use to evaluate a bid and determine whether a Bidder has the required qualifications. No other criteria shall be used.

A. EVALUATION CRITERIA

BSWML will evaluate and compare bids on the basis of price quoted by the eligible bidders to arrive at the least cost.

1. Technical Criteria

- 1.1.** The minimum technical level of the Goods and Related Services offered by the bidder shall comply with the minimum acceptable level and specification for each criterion enumerated in the Schedule of Supply.

The non-compliance of the minimum acceptable criteria shall make the bidder's bid as non-substantive. Whenever possible, these criteria will be evaluated on a pass-fail basis.

2. Economic Criteria

- 2.1.** Adjustment for Deviations from the Terms of

Payment Deviations from the Terms of Payment are not permitted.

- 2.2.** Adjustment for Deviations in the Delivery and Completion Schedule. The Goods covered by this bidding process are required to be delivered in accordance with, and completed within, the Delivery and Completion Schedule. Bids offering delivery schedules beyond stipulated completion period shall be rejected.

- 2.3.** Omissions or Missing Items:

The cost of omissions or missing items in the scope of supply, services, etc. would be not be considered. Bids offered for part scope of work from one lot shall be rejected.

- 2.4.** Local Handling and Inland Transportation

Cost for inland transportation, transit insurance and other incidental costs for delivery of the goods shall be included in the PRICE. These costs will be taken into account during bid evaluation. If a Bidder fails to include such costs in its bid, it will be considered as included in his bid price bid.



B. QUALIFICATION CRITERIA

1. Technical Criteria:

The Bidder shall submit the data and information along with the work order, completion certificate and reference on past performance etc. required to demonstrate that the Bidder meets the minimum criteria as specified in the chart below.

Sl No	Eligibility and Qualification Criteria	Compliance Required
1	The Bidder/Manufacturer/Authorized supplier/ dealer in the bid shall have valid registration with the Government. The manufacturing company/ OEM should issue Inclusive letter of authorization to the bidder participating in the bid.	Copy of Certificate of Registration with Government organization / copy of certificate of Incorporation/ Registration under companies Act, 1956/ 2013. (EPF and ESIC registration certificate) Manufacturers Authorization
2	The Bidder/Manufacturer/Authorized supplier/ dealer / average turnover for any two (2) years out of last Five (5) financial years (FY 2019-20 to 2023-24) preceding the bid due date shall not be less than Rs.1996.9 Lakhs. Further, the Financial Turnover of the Previous Years shall be given a Weightage of 10% per year to bring them to the Price Level of 2023 - 2024.	1. Certificate from the statutory auditor / CA clearly specifying the average annual turnover for the specified years. 2. The Bid must be accompanied by the Audited Annual Reports of the Bidder, preceding the year in which the Bid is made.
3	The Bidder/Manufacturer/Authorized supplier/dealer should have satisfactorily (i) supplied, delivered, tested and commissioned Video Wall, UPS, Command Center Monitoring Software & DG Set to any Government departments/ ULB / PSU in India and value should not less than Rs.499.21 lakhs in any one of the last 5 financial years (2019-20 to 2023-24). (ii) The Bidder/Manufacturer/Authorized supplier/ dealer should have supplied Video Wall, UPS, Command Center Monitoring Software & DG Set should be working satisfactorily for six months in last 5	For each eligible assignment, bidder(s) should furnish copy of work order/ Purchase Order/ LOI / LOA and Work completion certificate/successful commissioning certificate issued by the competent authority not below the rank of an Executive Engineer or equivalent.



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	years, supplied to any Government departments/ ULB / PSU in India in the last 5 financial years (2019-20 to 2023-24).	
4	The Bidder/Manufacturer/Authorized supplier/ dealer should have Liquid Assets and / or availability of Credit Facilities of not less than Rs.299.53 Lakhs	Credit lines / Letter of credit Certificate issued by any nationalized /scheduled bank shall be furnished.
5	Local Presence Manufacturer/authorized dealer/ supplier, the OEM should have presence in with their registered service center in India for a minimum period of 5 years with GST/VAT/Service Tax/ Sales Tax Registration for similar type Video Wall, UPS, Command Center Monitoring Software & DG Set equipment	Copy of GST/VAT/Service Tax/ Sales Tax Registration certificate or any other valid document/ registration certificate issued by the Central/ State Govt. department/ organization as proof of having the office (with address) of OEM for the last 5 years in India.

VIDEO WALL OEM PRE-QUALIFICATION

1. OEM of the offered DLP indoor video wall screen should have experience of supplying and installing minimum of 200 DLP Video walls at any command-and-control centre of Government/PSU/Semi-Government/Government undertaking or similar institution during the last 5 years. This supply could be either directly or through a partner or system integrator.
2. OEM of the offered video wall screen should be present in India with a registered office for minimum ten years from the date of the bid.
3. OEM shall be ISO 9001, ISO 14001, OHSAS 45001 & ISO 27001:1 certified. Certificates to be submitted.
4. OEM shall not have been blacklisted by any State / Central Government Department or Central /State PSUs. OEM Declaration to be submitted along with the technical bid .
5. Offered brands should not be from countries sharing land border with India. OEM Should Declare Country of Origin of Quoted Products. Evaluation Committee can check components at any time.
6. Quoted/Offered product model should be available on OEMs web site. Link of offered model -OEM website to submitted along with the technical bid.
7. OEM should have its own service center in Bangalore managed by their own



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engineers.

8. Valid BIS certificate to be provided for the products offered.

NOTE: Video Wall and UPS from same Vendor will be Given top priority.

ICCC BIDDER QUALIFICATION CRITERIA

SL no	Activity	MARKS
1	Company should have expert in Technical designing & execution of Integrated Command Center.	20
2	Should have in-house qualified certified ethical Hacker	05
3	In-house lead Auditor.	05
4	Should have in house Network operating Center	10
5	Vendor should have a qualified team in :	
a	Designing Network Infrastructure	05
b	Network Security solutions.	05
c	Storage & Backup.	05
d	Enterprise E- Surveillance	05
6	Qualified team to develop and Integrate software applications,	10
7	Business Intelligence processing & Robotic Process Automation	10
8	DATA Integration,	10
9	Artificial Intelligence & Machine learning.	10
Total		100

Note : The minimum qualification marks to be obtained as per the above



criteria is 75 marks

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- 1.1.**Has repair and service facilities in Bangalore, India and shall provide an undertaking that successful bidder shall either develop its own facility or authorize service center at Bengaluru for day-to-day maintenance of equipment's.

1.2.Spare Parts

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as LED Wall, Cables, DG related Items etc. Other spare parts and components shall be supplied as promptly as possible but, in any case, within 3 months of placement of order. Should assure the ready availability of the any or all the spare parts of the proposed equipment in India.

- 1) Bidder/ Authorized supplier/ dealer shall also furnish necessary certificate from Original Equipment Manufacturer, OEM certifying that they shall provide new & unused machine in the event, they are successful bidder.
- 2) The Bidder/Manufacturer/Authorized supplier/ dealer should certify that they will supply spares and render services for the offered equipment, for a minimum period of 07 years from the date of supply.
- 3) The Manufacturers or the bidders have not been banned / blacklisted by any Government 'or' Semi-Government Department 'or' PSU during last Five years and does not have Blacklisting History. If the bidders or manufacturers have been banned then this fact must be clearly stated. However, if this declaration is not furnished the bid shall be rejected.
- 4) Tenderers who meet the above specified minimum qualifying criteria, will only be qualified.

- 1.3.**Even though the Tenderers meet the above criteria, they are subject to be disqualified if they have:

- a) Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- b) Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.;



SECTION IV - BIDDING FORMS

A. TECHNICAL PROPOSAL SUBMISSION SHEET

Invitation for Bid No:DGM-2/BSWML/TEND/04/2025-26 Date: 06.05.2025

To,

**The Deputy General Manager - 2
Bengaluru Solid Waste Management Limited,
1st Floor, UNI Building, Thimmaiah Road,
Vasanth Nagar, Bengaluru-560 052**

We, the undersigned, declare that:



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(a) We have examined and have no reservations to the Bidding Document, including Addenda No.: (Insert the number and issuing date of each addenda);

(b) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in Schedule of Supply, the following Goods and Related Services:

Sl.No	Description of Goods and Related services
1	Supply, Installation & Commissioning of Video Wall, UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office.

(c) Our Bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

(d) If our Bid is accepted, we commit to obtain a Performance Security of 5% of the Contract Price for the due performance of the Contract.

(e) We are not participating, as Bidders, in more than one Bid in this bidding process.

(f) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed.

We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name (complete name of person signing the bid)

In the capacity of (legal capacity of person
signing the bid) Signed (signature of person)

Duly authorized to sign the Bid for and on behalf of (**name of bidder**)

Date (Insert date of signing)



B. (DETAILS OF TURNOVER)

Annual Turnover Proposal Submission Sheet		
Sl.No	Year	Turnover (Indian Rupees)
1	2019-20	
2	2020-21	
3	2021-22	
4	2022-23	
5	2023-24	
	Average	

C. (DETAILS OF LITIGATION / ARBITRATION AND OTHER CLAIMS)

Sl.No	Year	Name of the Employer	Matter of dispute	Disputed amount in Rs	Whether the award was for or against the firm or pending

Bidder must not hide any information regarding litigation or blacklisting otherwise legal action may be initiated in case of wrong information submitted by the bidder.



D. MANUFACTURER'S AUTHORIZATION

Invitation for Bid No.: DGM-2/BSWML/TEND/04/2025-26

Date: 06.05.2025

**To,
The Deputy General Manager - 2
Bengaluru Solid Waste Management Limited,
1st Floor, UNI Building, Thimmaiah Road,
Vasanth Nagar, Bengaluru-560 052**

WHEREAS (Insert complete name of manufacturer) who are official manufacturers of (Insert type of goods manufactured) having factories at (Insert complete address of manufacturer) do hereby authorize (Insert complete name of bidder) to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us (insert name of goods) and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with General Conditions of Contract, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We have repair and service facilities in India and we shall either develop our own facility or authorize a service center at Bengaluru for day-to-day maintenance of equipment's.

Name (complete name of person signing the security)

In the capacity of (legal capacity of the person signing

the security) Signed (signature)

Duly authorized to sign the Authorization for and on behalf of (complete

name of manufacturer) Date (Insert date of signing)

Note: This letter of authorization should be on the letterhead of the manufacturer and should be signed by a person with the proper authority to sign the document that is binding on the manufacturer.



SECTION V - SCHEDULE OF WORK

A. LIST OF GOODS AND RELATED SERVICES

Sl. No.	Description of Goods and Related services
1	Supply, Installation & Commissioning of Video Wall, UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office.

B. DELIVERY AND COMPLETION SCHEDULE:

The purpose of the delivery and completion schedule is to specify the delivery dates of the goods and related services. The delivery and completion schedule, as part of the schedule of supply constitute a contract document and, therefore it will be a part of the contract.

Sl. No.	Description of Goods and Related services	Contract completion period
1	Supply, Installation & Commissioning of Videowall, UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office.	2 months from the date of handing over the site.

C. Technical specifications

Bidder shall Supply, Installation & Commissioning of Video Wall, UPS, Command Center Monitoring Software & DG Set for installation or. BSWML shall provide the required electricity for Video Wall, UPS, Command Center Monitoring Software & DG Set as per requirement at BSWML office.



D. Technical Specification for Video Wall Specifications

Sl. No.	Video Wall Specifications	
1	Display wall Screen Size	70 inch (diagonally) with laser Light Source complete configuration with covered bae
2	Configuration	7 columns x 2 rows
3	Projection Technology	LASER DLP based Rear Projection, individual cubes should be equipped with one laser bank and the laser bank should have an array of diodes. Single or multiple diode failure should not impact image display on screen. Multiple Laser bank are not acceptable due to the possibility of convergence issue.
4	Total resolution of Video wall	Minimum wall native resolution of video wall should be 112 Mega pixel
5	Screen to screen gap	< 0.02mm
6	Brightness of engine	Min 2200 Lumens
7	Brightness Uniformity	Minimum 95%
8	Dust Prevention	Should be IP6X certified. Test certificate should be submitted as proof along with technical bid submission.
9	Light Source Lifetime	Normal mode: 60,000 hours: Eco mode: 80,000 Hours
10	Remote	IR remote control should also be provided for quick access
11	Inputs	1 No. of Display Port, 1 x DVI and 1 x HDMI each
12	Screen Support	Screen should be minimum 3 layers with a Hard Backing to prevent bulging with the rear layer of glass.
13	Heat Dissipation	Less than 1400 BTU/h- Normal mode
14	Power	Dual Redundant and Hot swappable power supply. This should be built inside the cube for fail safe operation with cooling features.
15	Eco mode	Less than 350 Watt
16	Cooling inside cube	Any advanced cooling mechanism and Cooling mechanism should not have any hazardous liquid.
17	Remote management through IP	Remote management through IP for parameter adjustment. Should be able to control and monitor individual cubes, multiple cubes.
18	Access	Rear only
19	Pixel clock source redundancy	Min 450 MHZ or higher to ensure flicker less display
20	Cube depth	Cube depth - 550 + or - 5% mm
	Operating conditions	



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	Temperature	10°C - 30°C
	Humidity	Up to 80% non- condensing
	Video wall controller	
1	Display controller	Controller should be able to control 14 video wall cubes
2	Architecture	The controller should be based on the latest architecture
3	Platform	Window 10
4	SSD	480 GB or higher
5	RAM	16 GB
6	Chassis type	19" Rack mount industrial chassis
7	Network	2 Network port
8	Resolution support for outputs	Controller should support 112 megapixels video wall resolution
9	Inputs	20 inputs
10	Key board and mouse extension	Keyboard and mouse along with mechanism to extend them to 20 Mtrs. operator desk from display controller to be provided.
11	Redundancy	Redundant hot swappable SSD in RAID configuration. Redundant hot swappable power supply also to be provided.
12	Others	The video wall and the controller should be of the same make to ensure better performance and compatibility.
13	OEM certification	All features and functionality should be certified by the OEM. The display modules, display controller and software should be form a single OEM.

Wall management software:		
1	Specification item	Detailed specification description
2	Scaling and display	Software to enable the user to display multiple sources in any size and anywhere on the display wall.
3	Auto source detection	Software should support auto source detection
4	Layout management	Should support for video, RGB, DVI, Internet explorer, Desktop application and remote desktop monitoring layouts.
5	Scenarios	Software should be able to save and load desktop layouts from local or remote machines.
6	Layout scheduler	All the layouts can be scheduled as per user convince.
7	Scenarios	Software should support auto launch of layouts according to specified time or event by user.
8	Lauch application	Software should be able to support
9	Integration with 3 rd party	The system should offer an interface to enable



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	devices	control from 3 rd party devices like Creston, AMX etc.
10	Live playback	Software should be able to provide live playback of videowall.
11	Workspace allocation	System should provide functionality to the administrator to define and allocate workspace for a particular operator or a group of operators when working on a video wall.
12	Authentication	Software should offer 4 levels of authentication (User accounts, Permission for functionality & Roles etc.)
13	Offline Layouts	It should be possible to create offline layouts
14	User friendly	Software should be user friendly
15	Ticker Type	Software should be able to prepare various kinds of tickers: text ticker, transparent and time ticker
16	Protection	The system should have a Hardware/software License key to protect the software from unauthorized access
17	Source Carousel	User can set multiple source that can change sequence after some time interval without changing the layout
18	Region management	Admin can assign video wall workspace to user based on pixel map
19	Snap sensitivity	Enables the magnetic behavior to fit the sources automatically for easy alignment on the wall
20	Scalable GUI	Scalable GUI to scale to any size of Video wall screen
21	Scheduler	User can schedule the layout on specific date & time, week day, weekend, start & end date
22	Source positioning	User can position the source input on Video wall with single click

Technical Specifications of UPS

Power Rating		120kVA/120kW
Input	Nominal Voltage	220/380 Vac; 230/400 Vac; 240/415 Vac
	Voltage Range	332 ~ 477 Vac (full load); 228 ~ 332Vac (63% ~100% load)
	Frequency	50/60 Hz
	Frequency Range	40 ~ 70 Hz
	Current Harmonic Distortion	3%
	Power Factor	0.99 (full load)
	Nominal Voltage	220/380 Vac; 230/400 Vac; 240/415 Vac
	Power Factor	



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Output	Voltage Regulation	1%
	Voltage Harmonic Distortion	2% (linear load)
	Overload Capability	105%: continuous; 106% ~ ≤ 125%: 10 minutes; 126% ~ ≤ 150%: 1 minute; > 150%: 1 second
	Output Frequency	50/60 Hz ± 0.05 Hz
	Cress Factor	3:1
	Short-circuit Current (RMS)	4500A, 90 ms
Efficiency	Online Mode	up to 96%
	ECO Mode	up to 99%
Battery	Type	SMF/ VRLA 12V
	Voltage	±240 Vdc (default)
	Charge Voltage	Floa charge: 272±2 Vdc; Boost charge: 280±2 Vdc
	Total VAH Required	Minimum VAH -109440 to Provide 30Mins Backup

Audible Noise		< 65 dBA
LED & LCD		LED indicators and multi-language LCD display
Communication Interfaces		SMART slot × 1, MINI slot × 1, Parallel port × 2, RS-232 port × 1, USB port × 1, REPO port × 1, Charger detection port × 1, Input dry contact × 2, Output dry contact × 6, External battery temperature port × 2
Manual Bypass Breaker		Yes
Compliance	IEC Pollution Degree (PD)	PD 2
	Over Voltage Category (OVC)	OVC III
	Type of System Earthing	TN-S, TN-C, TN-C-S
Environment	Operating Altitude	1000 meters (without derating)
	Operating Temperature	0 ~ 40°C
	Ambient Storage Temperature	-20 ~ 50°C
	Relative Humidity	5% ~ 95% (non-condensing)
	Ingress Protection (IP) Class	IP20



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Physical	Dimensions (W x D x H)	520×800×1760 mm
	Weight	Vendor/OEM To specify

Command center monitoring software

Sl.No	Specifications/Parameters	Compliance (Yes/No)
1	The Integrated Command & Control Center Platform (ICCC) shall be an enterprise class IP-enabled application. The ICCC user interface (UI) applications shall present a unified security interface for the management, configuration, monitoring, co - relation, intelligence and reporting of various embedded systems and associated edge devices.	
2	The ICCC shall support the seamless unification of various Public Safety elements IP Video Management System (VMS), AI Based Video Analytics, Automatic Number Plate Recognition (ANPR) System, Visitor Management System, Access Control System, Variable Messaging Display (VMD), Vehicle Tracking System (VTS), Incident management, Emergency response system, under a single platform.	
3	The ICCC user interface (UI) applications shall present a unified security interface for the monitoring, co - relation, intelligence and reporting of various Embedded Systems, Sub-Systems and associated edge devices.	
4	The platform must have native failover with no dependency on external virtualized or clustered applications. Solutions with external clustering like Windows Clustering, Microsoft SQL Clustering and VMware or Hyper-V etc. should not be proposed.	
5	The ICCC platform must be a true unified management experience for critical infrastructure Monitoring, simplifying control room operation and system integration, minimizing total cost of ownership, and increasing operational efficiency critical to rapid decision-making.	
6	The Command & Control solution should be implemented and complied to the industry open standards based	



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	Commercial-of-the-shelf (COTS) products.	
7	Platform shall be open architecture based, Highly Scalable and able to integrate multiple disparate Video Surveillance systems seamlessly on a common platform.	
8	Platform system shall provide a real time Common Operating Picture (COP) of all areas involving all agencies using a simple GUI.	
9	System should provide tool to define/create any event/rule based Standard Operating Procedure (SOP) for decision making by optimizing the time to resolution for emergency and crisis situations.	
10	Platform shall provide a dashboard functionality to manage workflows by integrating information from different agencies and systems to facilitate responsive decision making.	
11	The Integrated Command & Control Center Application Platform shall have a built-in ONVIF Device Discovery Tool, so that ONVIF Cameras can Directly be added to the ICCC Application Platform.	
12	The CCC shall embody the following characteristics:	
i.	Client-server Architecture	
ii.	Support Multi-Site, Multiple-Hierarchy Deployment	
iii.	Provide clear scalability	
iv.	Central administration capability	
v.	Support local redundancy and high availability options	
vi.	Capable of running in a virtual environment	
vii.	Provide a mechanism to define key performance indicators, trends, leading indicators and visualize the indicators on a web based configurable dashboard infrastructure	
viii.	Display a configurable indication of overall situation threat level	
ix.	Provide communication capability to include email, mass notification, and application-based messages	
x.	Support the simulation of events, such as alarms, for training purposes.	



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xi.	The System shall be Modular & Scalable & allows for customisation to meet precise need of customer's unique requirement.	
xii.	The System shall render services of Video Surveillance, Central Alarm, connection services to 3rd party data bases, Consume or Source web services.	
xiii.	The System shall have Graphical User Interface & tools to create Workflows & Rule Engine.	
13	Integration Features	
	Centralized Integrated Command and Control Center (ICCC) and video/event monitoring of unlimited cameras, Perimeter control devices, third party security devices spread across multiple sites or places. Integration including but not limited to following external devices or applications: IP Cameras through VMS, AI Based Video Analytics, Automatic Number Plate Recognition (ANPR) System, Visitor Management System, Access Control System, Variable Messaging Display (VMD), Vehicle Tracking System (VTS)	
14	Supports protocols integration with SCADA, Modbus, BACnet, SIP, OPC, I/O inputs and Relay outputs, SDK integration in all programming languages, Database integration, Third party Application integration. Integration may also be required to be done and as per customer requirement.	
15	Integrated Command and Control Center (ICCC) Application, Video Management Software (VMS), AI Based Video Analytics Software should be from same make for Seamless Integration between all different components.	
16	All the alarms should be shown in same system. The systems should have ability to integrate with devices by either sending events from or receiving events from other devices. Event SDK support required. Events from Video System should be able integrate with third party applications and devices.	
17	Integrated Command, Control, and Information Management System (ICCC) for handling all security operations-related tasks and improve work efficiency	
18	The ICCC system shall be able to integrate, connect, and correlate information from security data and information from the following security subsystems using Ethernet-based connectivity:	
o	o New Proposed Video Management Software (VMS)	



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0	o AI Based Video Analytics	
0	o Automatic Number Plate Recognition (ANPR)	
0	o Visitor Management System	
0	o Vehicle Tracking System (VTS)	
19	The ICCC system shall be able to integrate, connect, and correlate information from security data and information from the following security subsystems using Ethernet-based connectivity.	
20	The ICCC system shall enable the operator to quickly visualize the environment and assess alarm by reviewing related security information.	
21	Graphical User Interface (GUI) Display Functions	
i	View and handle multiple alarms at one time.	
ii	View multiple video windows at one time. Operators shall be able to resize and move video windows.	
iii	View windows in a single monitor, across multiple monitors or video walls.	
iv	Access, display and manage events / alarms and related security data and information from subsystem based on priority and authority level.	
v	Enable different graphical user interface “panes” to be modified to provide a customized operator experience.	
22	GIS Maps	
i	Multiple map integration including OSM, Custom Maps, Google and Bing. Ability to add maps defined or given by customer.	
ii	Each map should support multiple layers or hierarchy of Base Layer and Overlay layer. Execute Query on layers and export the results.	
iii	Should support Geo Server	
iv	Finding Shortest path/Best Route between 2 GPS location. Measure distance and area on a map.	
v	Supports Geo coding and reverse geo coding.	



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vi	View and plot devices, cameras, vehicles, sensors and field personnel based on their GPS coordinates.	
vii	Devices, incidents, events and Status can be monitored and tracked on Maps	
viii	The GIS application shall enable real time information dissemination (Geo-Spatial and Non Geo-Spatial data)	
ix	The GIS application shall enable users to open up a new incident and directly associate it with a map location or to associate an already opened incident with a new map location.	
x	The system shall also be capable to receive an API call which will open up a new incident and automatically place it on the map using a map location passed via API / Web Services. The relevant map location shall be displayed on the map for as long as the incident is open.	
xi	Customized Dashboards based on widgets and user selected options	
xii	Allow incorporation of “live” map displays from on-line map sources	
xiii	Allow user to interactively drill down to specified security zones and sub-zones.	
xiv	Allow user to view sensor and related name from map console.	
xv	Allow resources and objects to be tracked on map with geo-referenced trail.	
xvi	Visually display an alarming sensor on map	
xvii	Visually differentiate sensor alarm severities on map through different colour and icon identifiers	
xviii	Immediately view alarm details (including description, video, etc.) and investigate the alarm from the map.	
xix	Allow user to choose camera from map to view live video.	
xx	Allow user to choose camera to play, pause, stop, slide forward or backward, and play recorded video from selected time.	
23	Dashboard	
i	Provide alarm summary of each monitoring zone or monitoring area in graphical chart format.	



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ii	Open Alert Count by Monitoring Zone / Monitoring Area	
iii	Enable Monitoring Zone or Monitoring area default to Summary view dashboard or to a map when the zone or area is selected	
24	SOPs (Standard Operating Procedures)	
i	Ability to define SOPs (Standard Operating Procedures) to effectively handle a security situation.	
ii	Flowchart based creation of SOPs in the web interface.	
iii	Situation Management by defining appropriate actions, messages, and acknowledgement for alerts & events from various devices.	
iv	Define or customize rules(as per customer requirement) between different sensors and devices	
v	Actions and SOPs can be defined with logical if-then-else conditions.	
vi	Load text, documents, images or other files or forms as instructions	
vii	Options to Forward alarms to other users in the system.	
viii	Heat map of events to be shown on GIS map including nearest Field personnel calculations	
ix	Incident Management Alarm reports including device status connect and disconnect Status reports.	
x	Actions taken as part of SOP should be logged in audit trail with date time stamp and operator comments	
xi	Software/ application shall support on-demand or automatic outgoing call initiation.	
25	Video Display Integration	
i	Shall view live or recorded video from resizable and movable windows/Grid.	
ii	Should have an ability to perform video controls for video systems from workstation	
iii	Shall play, fast-forward, rewind, pause, and specify time to play recorded video	
iv	Shall take a video still image (snapshot) from live or recorded video	
v	Shall export video for user specified time and duration	



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vi	Shall have the capability to move PTZ cameras	
vii	Shall view Video in Video Matrix.	
viii	Shall display in 1x1, 2x2, 3x3 and 4x4 window formats	
ix	Shall enable operator to specify video windows to be displayed in matrix/ Video Wall.	
x	Shall enable matrix settings to be saved per user	
xi	Shall be able to define view either live or recorded video or both Simultaneously can be displayed in the video matrix window.	
xii	Shall enable video snapshot to be taken and saved from any window pane in the matrix view	
xiii	Shall rotate through multiple video views based on predefined video camera sequence and duration.	
xiv	Shall enable the user to pause the rotation of video and resume the video rotation again	
xv	Shall enable times between new video to be adjusted	
xvi	Shall enable both live video and recorded video to be played Simultaneously.	
xvii	Shall enable alarms to be generated from any video pane	
xviii	Shall enable user to only view and control video for which they have been assigned permissions by the administrator	
xix	Shall manually create an alarm from the live or recorded video with specified severity and description	
26	User Specific & Customizable Dashboard	
i	Provide alarm summary of each monitoring zone or monitoring area or a Monitoring Site in graphical chart format.	
ii	Open Alert Count by Monitoring Zone / Monitoring Area	
iii	Enable Monitoring Zone or Monitoring area or Monitoring a Site default to Summary view dashboard or to a map when the zone or area is selected.	
iv	Collects major information from other integrated sensors/platforms.	
v	Multi-displays configurations	
vi	Use of, GIS tool which allows easy map editing for wide	



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	area monitoring (Google map, Bing map, OSM map, etc.).	
vii	Should provide tools to assemble personalized dashboard views of information pertinent to incidents, emergencies & operations of command center	
viii	Should provide historical reports, event data & activity log. The reports can be exported to pdf or html or any other format requested by the client.	
ix	Should provide dashboard filtering capabilities that enable end-users to dynamically filter the data in their dashboard based upon criteria, such as region, dates, product, brands, etc. and capability to drill down to the details	
27	SOP's (Standard Operating Procedures)	
i	Must have the Ability to define SOPs (Standard Operating Procedures) to effectively handle a security situation.	
ii	Command & Control Centre should provide for authoring and invoking un-limited number of configurable and customizable standard operating procedures through graphical, easy to use tooling interface.	
iii	Standard Operating Procedures should be established, approved sets of actions considered to be the best practices for responding to a situation or carrying out an operation.	
iv	The users should be able to edit the SOP, including adding, editing, or deleting the activities.	
v	There should be provision for automatically logging the actions, changes, and commentary for the SOP and its activities, so that an electronic record is available for after-action review.	
vi	The SOP Tool should have capability to define the following activity types:	
vii	Manual Activity - An activity that is done manually by the owner and provide details in the description field.	
viii	Automation Activity - An activity that initiates and tracks a particular work order and select a predefined work order from the list.	
ix	If-Then-Else Activity - A conditional activity that allows branching based on specific criteria. Either enter or select values for Then and Else.	
x	Notification Activity - An activity that displays a notification window that contains an email template for the activity	



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	owner to complete, and then send an email notification.	
xi	SOP Activity - An activity that launches another standard operating procedure.	
xii	ICCC Platform should provide for authoring and invoking un-limited number of configurable and customizable standard operating procedures through graphical drag and drop design tool preferably using workflow engine	
xiii	ICCC platform should be able to pass the SOP step on to operator workstation for the user to respond based on his role and responsibility in the SOP to achieve faster response to the incidences or events.	
xiv	Flowchart based creation of SOPs in the web interface.	
xv	Situation Management by defining appropriate actions, messages, and acknowledgement for alerts & events from various devices.	
xvi	Define or customize rules(as per customer requirement) between different sensors and devices	
xvii	Command & Control Centre should be able to correlate two or more events coming from different subsystems (incoming sensors) based on time, place, custom attribute and provide correlation notifications to the operators based on predefined business and operational rules in the configurable and customizable rule engine.	
xviii	Load text, documents, images or other files or forms as instructions	
xix	Options to Forward alarms to other users in the system.	
xx	Incident Management Alarm reports including device status connect and disconnect Status reports.	
xxi	Actions taken as part of SOP should be logged in audit trail with date time stamp and operator comments	
xxi	Software/ application shall support on-demand or automatic outgoing call initiation.	
28	Incident Management and Escalation Matrix	



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i	Any alarm or event can be made an incident either manually or automatic	
ii	Defining life cycle of incident from start to close. Assign incident to operators, field personnel.	
iii	Application should show the created incident in the Incident Register panel. Application Incident Register Panel should show the following details of the incident:	
	o Incident ID with GPS Coordinates	
	o Camera Location	
	o Type of Alert	
	o Alert Time	
	o Trigger option to initiate the SOP	
	o Status/ progress of the incident	
iv	The Software/ application shall be able to manually associate an incident to an asset and, vice versa, manually associate an asset to an existing incident.	
v	Define escalation matrix of incidents. For example In case of no response from operator, immediate SMS to higher Authorities or alert higher authorities if a device is not fixed within certain time limit.	
vi	Variety of Actions on events and incident: Minimum Actions Required: SMS, PHONE CALL, EMAIL, SOUND Alarm, PTZ movement, SNMP, Video PoP up, Mobile Phone Push Notifications.	
vii	Should support for sudden critical events and linkage to standard operating procedures automatically without human intervention.	
viii	Should support for multiple incidents with both segregated and/or overlapping management and response	
ix	Should provide facility to capture critical information such as location, name, status, time of the incident and be modifiable in real time by multiple authors with role associated permissions (read, write).	
x	Incidents should be captured in standard formats to facilitate incident correlation and reporting.	
xi	The system must identify and track status of critical infrastructure / resources and provide a status overview of facilities and systems	
xii	Should provide detailed reports and summary views to multiple users	
29	Alarm Centre	
i	Ability to pop-up cameras in alarm screen. A separate screen provided where cameras are opened dynamically based on priority of alarms.	
ii	Screen configurable to view alarms or 1 -40 cameras simultaneously.	



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iii	Defining Instruction Message for operator and Acknowledgement for alarms	
iv	Alarm priority and alarm colour based on Severity	
v	Ability to run macros on an alarm	
vi	Ability to send SNMP messages on events	
30	Central Control Features	
i	Centralized as well as distributed architecture for Video and Alarm monitoring of Unlimited cameras and devices spread across multiple sites and places	
ii	Hierarchical and group view of all sites at centralized location.	
iii	Database backup/restore option.	
iv	Alerts in central station or individual sites according to rules.- Email, SMS, Phone call, Sound alert, Pop up	
v	Connection to Multiple monitors for Live(cameras, Fixed and PTZ), Alarm, GIS Map , Device status	
31	User Rights	
i	Create users based on rights and roles.	
ii	Options for configuring rights based on following grouping Administrator, Viewer, Security Guard/Field Personnel	
iii	GUI User Interface control, look & feel configurable according to user role.	
iv	Setting up and configuration of alerts by authorized user	
32	Mobile Interface	
i	Any user can login and open application from Mobile phones or ipads.	
ii	Alerts on Mobile phones in form SMS, MMS or push Notification	
iii	Ability to See Videos and Incident Snapshots on Mobile Interface.	
iv	Send Video, Audio and pictures from Mobile Phone to Command Centre	
v	Update Incident Details and reporting from Mobile Interface.	
33	Reporting	
i	Command & Control Centre should provide easy to use user interfaces for operators such as Click to Action, Charting, Hover and Pop Ups, KPIs, Event Filtering, Drill down capability, Event Capture and User Specific Setup	



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ii	The solution should generate Customized reports based on the area, sensor type or periodic or any other customer reports as per choice of the administrators	
iii	Automatic and Manual reports generation of system status and export report in pdf, excel or html format.	
iv	Automatic logging of operator actions or response mechanism.	
v	The reports shall be designed/ developed in hierarchical manner.	
vi	User can be able to view reports from summary to particular incident/ event/ alert/ case details	
vii	Filter details based on location, name, brand and display on dashboard	
viii	Checking of incidents and health status	
ix	Encrypted communication between clients and servers.	
x	Automatic Report generation and email sending based on Configurable schedule of time, Day wise, Week wise and Month wise	
xi	The software/ application shall support searching through recorded video based on time, date, video source, image region and have the results displayed as both at panel and a series of thumbnail images.	
34	Cyber-Security	
	The Offered Integrated Command & Control Center (ICCC) Application should have an Application Security Audit Certificate from STQC for the ICCC Application as per the OWASP Guidelines to Mitigate Cyber Security Attacks. The Application must have already undergone Security Audit Certification/Auditing on or before the Bid Publishing Date. The Security Audit Certificate from STQC must be Submitted as a Documentary Evidence/Proof.	
35	ICCC OEM Pre-Qualification Criteria	
	The Intellectual Property Rights (IPR) of Offered Integrated Command & Control Center (ICCC) Application Platform must not reside in Country sharing Land Border with India. The Integrated Command & Control Center (ICCC) Application Platform Offered should not be Developed/manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land	



	Border with India. OEM must provide with a Declaration about the Intellectual Property Rights (IPR) & Source Code Residence/Filing in the respective Country as a Documentary Evidence. The Integrated Command & Control Center (ICCC) Application Platform OEM whose Intellectual Property Rights (IPR) & Source Code residing in India shall be Preferable. The OEM who is Claiming to be Make in India OEM with Local Content greater than 50%, then their Intellectual Property Rights (IPR) & Source Code must Reside in India only. Documentary Evidence to be Provided.	
	The Integrated Command & Control Center (ICCC) Application Platform should have been Supplied in at least 3 Mission Critical Defense Projects in India. Purchase Order Copy to be Furnished along with the Bid Document to Substantiate the Proof.	
5	The VMS, Software OEM shall have a direct Registered Office in India without any Collaboration, Joint Venture, Distributor, Parent Company & should be in Operational for the Last 10 Years as on the Last Date of Bid Submission.	
6	The Intellectual Property Rights & Source Code of Offered Video Management Software (VMS) must not reside in a Country that is sharing Land Border with India. The Video Management Software (VMS) Offered should not be Developed/manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land Border with India. OEM shall provide a Declaration about the intellectual property rights & Source Code as a Documentary Evidence & Copyrights Certificate. The OEM who is Claiming to be Make in India OEM with Local Content greater than 50%, then their Intellectual Property Rights (IPR) & Source Code must Reside in India only. Documentary Evidence to be Provided. Any False Declaration can lead to Bid Rejection.	
	Cyber Security Features	
1	The Offered Video Management Software (VMS) Application should have undergone Security Audit as per OWASP Guidelines & must Possess an Application Security Audit Certificate from CERT-IN Empaneled Auditors for the VMS Application as per the OWASP Guidelines to Mitigate	



	Cyber Security Attacks. The Application must have already undergone Security Audit Certification/Auditing on or before the Bid Publishing Date. The Security Audit Certificate must be Submitted as a Documentary Evidence/Proof.	
2	The Video Management Software should support RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from cameras (If Supported by Cameras) to VMS as well as support streaming of RTSPS or SRTP or RTSP over TLS Encrypted Live Streaming from VMS servers to clients.	

Technical Specification DG Set

Supply of 160 kVA D.G. Set with Exhaust After treatment and with Acoustic Enclosure along with Accessories.

1) DG Set

Best make Diesel Engine with Radiator Water Cooled, turbocharged with after cooler, suitable for prime duty Generating Set application, with an output of 160 kVA/128 KW under NTP conditions of BS:5514, with an overload capacity of 10% for one hour in every 12 hours of Operation.

The DG Set should be capable of voltage buildup within 15 to 20 seconds after receiving start command and it should be ready to take first step load within 15 to 20 seconds after receiving start command on voltage buildup

2) DIESEL ENGINE:

The Engine shall be complete with the following accessories:

- The total No. of Cylinders is 6 Nos In-line type.
- Engine cubic capacity should not be less than 6.7 L
- Electronic Engine with electronic fuel injection system
- Radiator with blower fan
- Corrosion inhibitor / liquid coolant
- Spin-on filters-fuel & lube oil
- Flywheel housing and flywheel to suit single bearing alternator



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- Dry type and replaceable paper element air cleaner with restriction indicator
- Standard integral set-mounted radiator system, designed and tested for 50°C ambient temperature
- Optimized turbocharger for increase altitude capabilities
- Hospital Grade silencer mounted inside acoustic enclosure
- Stainless steel exhaust flexible bellows
- Electric starters with soft start engagement features
- Battery charging alternator
- Anti-vibration mounts of reputed make.
- Protective guards for all rotating parts.
- The engine should be Full Authority electronically controlled to meet compliance with stringent emission norms & improve overall performance efficiency and reliability

3) ALTERNATOR:

Best approved make standard design Alternator, suitably rated at 160kVA/128kW at 0.8 PF, 415 Volts, 3 Phase, 4 wires, 50 cycles/sec., 1500 RPM, self-excited and self-regulated, with brushless excitation, Band of Voltage Regulation +/- 0.5% of rated voltage, from no load to full load, Insulation Class "H". The Alternator generally conforms to BS:5000/IS:4722.

- Brushless type, Screen protected, Revolving field, Self-excited alternator conforming to IS/IEC 60034-1
- Better motor starting capability
- Best in class efficiency
- Compact design with sealed bearings for longer life and lesser maintenance
- Impregnation on all wound components for better mechanical strength

4) EXHAUST AFTER TREATMENT SYSTEM:

Optimized design of exhaust after treatment system (EATS) to work in tandem with engine. The EATS and Engine should have **SINGLE** integrated controller to improve reliability of Engine and EATS. The EATS should be mounted in a separate compartment inside acoustic enclosure, to enable operator and technicians to have sufficient workspace around engine and



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alternator inside acoustic enclosure. The Diesel Exhaust Fluid tank (DEF tank) should be mounted in separate space inside acoustic enclosure to avoid corrosion effect on engine / alternator components. Exhaust After Treatment Systems should preferably manufactured by the engine manufacturer to ensure seamless integration, quality control & compliance with regulatory standards and reliability.

5) REMOTE MONITORING DEVICE:

A 4G compatible real time DG status monitoring device should be supplied as standard scope of supply along with DG set. The monitoring device should be capable of conveying necessary alerts to the operator for safe operation of Engine, Alternator and Exhaust After Treatment system. The remote monitoring device should have provision to monitor Fuel and DEF level to alert the customer suitably. The remote monitoring device should have a portal for the customer to login to monitor the DG set as per need.

6) INTEGRATED DG CONTROLLER:

- AMF Functionality
- SYNC compatible
- Audible & Visual warning for inducement
- Microprocessor based intuitive operator interface with LED backlit 128X64 pixel graphic display with tactile feel soft switches.
- Indications - Generator set status
- Engine Metering: Oil pressure, Engine temperature, starting battery voltage, Engine running hours
- AC Alternator Metering: L-L Voltage and L-N Voltage, Current (phase and total), kVA (phase and total) and Frequency, kWh, Total & per phase (kw & kVA), PF, Utility Voltage and Freq.
- Engine Protection: Low lube oil pressure, High/Low coolant temperature, Battery Over/Under/Weak Volts, Fail to Crank/ Start, Sensor failure, Cranking lockout, Low fuel level.
- AC Alternator Protection: Over/Under Voltage, Over/Under Frequency, Loss of AC sensing. Overspeed, Over Current, kW overload
- Data Logging: Engine hours, Control hours and up to 5 recent fault codes
- Configurable glow plug control
- 12/24 Volt DC operation
- Sleep mode



- Modbus interface (RS485 RTU)
- Certifications - meets the requirement of relevant ISO, EN, Mil Std. and CE standards
- Maintenance due alarm based on Engine Run Time and due date
- Fuel and DEF level visual Display
- Exerciser scheduler
- The manufacturing of the integrated controller should rest with the engine manufacturer to guarantee optimal integration and for better reliability

7) BASE FRAME

Sturdy, fabricated, welded construction, Base Frame for mounting the above Engine and Alternator. Required number of anti-vibrations mounting pads, charged battery, battery stand, battery charger and leads etc.,

8) FUEL TANK

Min 385 Liters capacity sub-base Fuel Tank complete with level indicator, fuel inlet and outlet, air vent, drain plug and provision for fuel filling should be from outside acoustic enclosure with lock and key.



SECTION VI - GENERAL CONDITIONS OF CONTRACT

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

- a) "Contract" means the Agreement entered into between BSWML and the Successful bidder, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- b) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.
- c) "Contract Price" means the price payable to the Successful bidder as specified in the Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
- d) "Day" means calendar day.
- e) "Delivery" means the transfer of the Goods from the Successful bidder to BSWML in accordance with the terms and conditions set forth in the Contract.
- f) "Completion" means the fulfillment of the Related Services by the Successful bidder in accordance with the terms and conditions set forth in the Contract.
- g) "GCC" mean the General Conditions of Contract.
- h) "Goods" means all of the commodities, raw material, machinery and equipment, compacter vehicles and/or other materials that the Successful bidder is required to supply to BSWML under Contract.
- i) "Purchaser" means BSWML purchasing the Goods and Related Services.
- j) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation and other similar obligations of the Successful bidder under the Contract.
- k) "SCC" means the Special Conditions of Contract.
- l) "Successful Bidder" means the Manufacturer /Authorized dealer or company or a combination of the above, whose bid to perform the Contract has been accepted by BSWML and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Successful bidder.



2. Contract Documents

Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.

3. Corrupt and Fraudulent Practices

The Government requires that Bidder/ Suppliers/ Contractors observe the highest standard of ethics during the procurement and execution of Government financed contracts. In pursuance of this policy, the Government:

a) Defines for the purposes of this provision, the terms set forth as follows:

- i “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- ii “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government, and includes collusive practice among Bidders (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition;

b) will reject the proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government-financed contract

d) **2.1 Minimum** eligibility criteria for participation in the bids are:

Bidders should not be associated, or have associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of bids.

4. Interpretation

4.1 If the context so requires it, singular means plural and vice versa.

4.2 Entire Agreement



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The Contract constitutes the entire agreement between BSWML and the Successful bidder and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.



4.3 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.4. Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5 Language

The Contract as well as all correspondence and documents relating to the Contract exchanged by the Successful bidder and BSWML, shall be written in English language. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.

The Successful bidder shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

6 Notices

Any Notice given by one party to the other pursuant to the Contract shall be in writing. The term "in writing" means communicated in written form with proof of receipt.

A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.

7 Jurisdiction

For all legal matters Jurisdiction shall be Bengaluru only.

8 Scope of work

The Goods and Related Services to be supplied shall be as per Schedule of Supply mentioned in the bid document Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.

9 Delivery

The Delivery of the Goods and Completion of the Related Services shall



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be in accordance with the Delivery and Completion at BSWML.





10 Successful bidder Responsibilities

The Successful bidder shall supply all the Goods and Related- Services included in the Scope of work in accordance with Schedule of work.

11 Contract Price

Prices charged by the Successful bidder for the Goods delivered and the Related Services performed under the Contract shall not vary from the prices quoted by the Successful bidder in its bid.

12 Terms of Payment

The Successful bidder's request for payment shall be made to BSWML in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant upon fulfillment of all the obligations stipulated in the Contract.

The Tentative Milestones payments to the bidder shall be as follows, however a detailed milestone activity with payment schedule shall be submitted by the successful bidder, which shall be approved by BSWML with or without changes.

Descript ion of Mileston e	Physical Achievement	Period from the date of Notice to proceed/ Possession of site cumulative months	% of payment
Milestone 1	Supply, Installation & commissioning of all equipment	15 days	50% of the cost
Milestone 2	Completion of assigned work including Integration, Go-Live (Including Trial Run)	30 days	45% of the cost
Milestone 3	After Satisfactorily functioning	60 days	5% of the cost (ensuring the completion)

Payments shall be made promptly by BSWML, no later than sixty (60) days after submission of an invoice or request for payment by the Successful bidder, and BSWML has accepted it.

13 Taxes and Duties

The Item Rate shall be Exclusive of all Taxes,. The Tenderer may consider Taxes, Duties, etc. for the Purpose of Tendering prevailing one month earlier to the Date of Submission of the Tender. Subsequent Changes affected either by Government of Karnataka or Government of India, the Employer may consider Reimbursement of such Increase in the Taxes, Duties, Royalties, etc. upon proper Certification from Appropriate Tax



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Authorities. Any Reduction in Taxes, Levies, Royalties, etc. either by Government of Karnataka or Government of India, the Tenderer shall reimburse difference in such reduction to the Employer.

14 Performance Security

Within 30 days of receipt of the notification of contract award, the Successful bidder shall furnish separate Performance Security for an amount equal to 5% of the contract value in the form of Bank guarantee, The Performance security on capital cost to be valid for a period of one year/ DLP/ warranty period. In the event of any correction of defects or replacement of defective material during the Warranty period, the Warranty for the corrected/replaced material shall be extended to a further period of 12 months and the Performance Bank Guarantee for proportionate value shall be extended 60 days over and above the initial Warranty period.

The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Successful bidder 's failure to complete its obligations under the Contract.

The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:

- a) A Bank guarantee or irrevocable Letter of Credit, issued by a Nationalized/Scheduled bank in the form provided in the tender documents or another form acceptable to the Purchaser or
- b) A cashier's cheque or Banker's certified cheque, or crossed demand draft or pay order drawn in favour of the Purchaser.;

The Performance Security will be discharged by the Purchaser and returned to the Successful bidder not later than 60 days following the date of completion of the Successful bidder's performance obligations, including any Warranty obligations, under the Contract.

In the event of any contract amendment, the Successful bidder shall, within 20 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract as amended for 60 days after the completion of performance obligations including Warranty obligations.

15 Copyright

The copyright in all drawings, documents, and other materials containing data and information furnished to BSWML by the Successful bidder herein shall remain vested with the Successful bidder, or, if they are furnished to BSWML directly or through the Successful bidder by any third party, including Successful bidders of materials, the copyright in such materials shall remain vested in such third party.



BSWML and the Successful bidder shall not misuse documents, data, and other information received from the Successful bidder for any purposes related to the Contract.

17 Specifications and

Standards

Technical

Specifications

The Successful bidder shall ensure that the Goods and Related Services comply with the technical specifications and other provisions of the Contract. The Goods and Related Services supplied under this Contract shall conform to the standards mentioned Schedule of Work and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the

official standards whose application is appropriate.

18 Packing and Documents

The Successful bidder shall provide such packing of the Goods/spares as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.

The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any and in any other instructions ordered by BSWML.

19 Insurance

The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery. The Successful bidder has to do transit insurance of all the equipment and vehicles up to BSWML workshop/store.

20 Transportation

Transportation of the Goods shall be in accordance with the Schedule of Work.

21 Inspections and Tests

The Successful bidder shall carry out all tests and/or inspections of the Contract



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Goods and Related Services by Govt. Authorized Quality inspection agencies.

The inspections and tests may be conducted on the premises of the Successful bidder, at point of delivery, and/or at the final destination of the Goods, if conducted on the premises of the Successful bidder, facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to BSWML.

BSWML designated representative shall be entitled to attend the tests and/or inspections.

Whenever the Successful bidder is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to BSWML. The Successful bidder shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable BSWML its designated representative to attend the test and/or inspection.

BSWML may require the Successful bidder to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Successful bidder reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Successful bidder 's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

The Successful bidder shall provide BSWML with a report of the results of any such test and/or inspection.

BSWML may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Successful bidder shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to BSWML, and shall repeat the test and/or inspection, at no cost to BSWML.

The Successful bidder agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by BSWML its representative, nor the issue of any report pursuant shall release the successful bidders from any warranties under the Contract.

22 Liquidated Damages

A. **For Supply** : If the successful bidders fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, BSWML may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of



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the Contract Price for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the SCC. Once the maximum is reached, BSWML may terminate the Contract.

23 Warranty

The Successful bidder warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

The Successful bidder further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal conditions.

The warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination, or for eighteen (18) months after the date of shipment whichever period concludes earlier.

BSWML shall give Notice to the Successful bidder stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof arising under this warranty.

Upon receipt of such notice, the Successful bidder shall, **within the period specified in the SCC**, and with all reasonable speed, repair or replace the defective Goods or parts thereof, free of cost at the ultimate destination. The Successful bidder shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. In the event of any correction of defects or replacement of defective material during the Warranty period, the Warranty for the corrected or replaced material shall be extended to a further period of 12 months.

If the Successful bidder, having been notified, fails to remedy the defect(s) **within the period specified in the SCC**, BSWML may proceed to take such remedial action as may be necessary, at the Successful bidder risk and expense and without prejudice to any other rights which the BSWML may have against Successful bidder under the Contract.

24 Limitation of Liability

Except in cases of gross negligence or willful misconduct:

Neither party shall be liable to the other party for any indirect or
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consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Successful bidder to pay liquidated damages to BSWML; and

- a) The aggregate liability of the Successful bidder to BSWML, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the SCC, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Successful bidder to indemnify BSWML with respect to patent infringement.

25 Force Majeure

The Successful bidder shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Successful bidder that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Successful bidder. Such events may include, but not be limited to, acts of BSWML in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force Majeure situation arises, the Successful bidder shall promptly notify BSWML in writing of such condition and the cause thereof.

26 Extension of Time

If at any time during performance of the Contract, the Successful bidder should encounter conditions impeding timely delivery of the Goods or completion of Related Services, the Successful bidder shall promptly notify BSWML in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Successful bidder notice, BSWML shall evaluate the situation and may at its discretion extend the successful bidder time for performance, in which case the extension shall be ratified by the parties by amendment.

Except in case of Force Majeure, a delay by the Successful bidder in the performance of its Delivery and Completion obligations shall render the Successful bidder liable to the imposition of liquidated damages, unless an extension of time is agreed upon.

27 Termination

The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

27.1 Fundamental breaches of Contract shall include, but shall not be limited to, the following:



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- a. The Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;
- b. The Employer instructs the contractor to delay the progress of the works, and the instruction is not withdrawn within 30 days;
- c. The Contractor becomes Bankrupt or goes into Liquidation other than for a Reconstruction or Amalgamation.
- d. The Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;
- e. The Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- f. If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract, then the Employer may

27.2 Termination for Default

BSWML, without prejudice to any other remedy for fundamental breach of Contract, by Notice of default sent to the Successful bidder, may terminate the Contract in whole or in part:

- i. If the Successful bidder fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by BSWML.
 - ii. If the Successful bidder fails to perform any other obligation under the Contract.
- a) In the event BSWML terminates the Contract in whole or in part, BSWML may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Successful bidder shall be liable to BSWML for any additional costs for such similar Goods or Related Services.
 - b) If the Successful bidder, in the judgment of BSWML has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract.

Any of the following events shall constitute an event of default by BSWML, unless caused by a Service provider event of default or a Force Majeure Event.

- c) BSWML has failed to make any payments due to the Service Provider as per Section VI clause 13 and more than 90 (ninety) days have elapsed since such default;
- d) BSWML has repudiated this Agreement;



- e) BSWML commits a material default in complying with any of the provisions of this Agreement and such default has a material adverse effect on the service provider;

27.3 Termination for Insolvency

BSWML may at any time terminate the Contract by giving Notice to the Successful bidder if the bidder becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Successful bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to BSWML.

28 Payment upon Termination

28.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

28.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly

29 Procedure for resolution of Disputes: Deleted

30 If Assignment

Neither BSWML nor the Successful bidder shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party



SECTION VII - SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

Sl.No.	Special Conditions of Contract
1	Upon delivery of the Goods, the Successful bidder shall notify BSWML and send the following documents to BSWML: 3 copies of the Successful bidder's invoice showing the description of the Goods, quantity, unit price, and total amount; (a) Manufacturer's or Supplier's warranty certificate; (b) Inspection certificate issued by the Govt or BSWML nominated inspection agency, and the Supplier's factory inspection report; and (c) Certificate of origin. (d) Receipt of Goods from the authorized officer by Commissioner of BSWML along with details of stock entry in BSWML. (e) Physical inspection report of authorized officer of BSWML.
2	The prices shall be fixed. No price adjustments shall be paid.
3	Third party inspection by Govt. Authorized Quality inspection agencies will be carried out
4	Payment of the Contract as per the Tender Document (Payment Terms) Clause No:12
5	The currencies for payments shall be Rupees (INR)
6	The BSWML shall not be responsible for any of the taxes, duties and levies imposed on Successful bidder.
7	The Successful bidder shall provide a Performance Security of 5% of the Contract Value. The Performance security on capital cost to be valid for a period of one year/ DLP/ warranty period. The Performance Security shall be denominated in Indian Rupees only.
8	The types of acceptable Performance Securities are: A Bank guarantee or irrevocable Letter of Credit, issued by a Nationalized/Scheduled bank in the form provided in the tender documents or another form acceptable to the BSWML or A cashier's check or Banker's certified check, or crossed demand draft or pay order drawn in favour of the BSWML.; or Specified small savings instruments pledged to the BSWML.
9	Discharge of Performance Security shall take place:



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	The Performance Security of 5% of the Capital cost shall be released only after 100% satisfactory completion of Defect Liability Period of 12 months.
10	The packing, marking and documentation within and outside the packages shall be as mutually agreed between the Purchaser and Successful bidder prior to delivery of the Goods.
11	The insurance coverage shall be in accordance with: The Successful bidder should supply the equipment's with transit insurance up to BSWML workshop/site. Further the Successful bidder will insure the Goods & TS facility in an amount equal to 100 percent of the price of the Goods & infrastructure from "Warehouse" to "Warehouse" on "All Risks" basis, including War Risks and Strikes.
12	Obligations for transportation of the Goods shall be on the Successful bidder
13	(a)The Successful bidder, purchaser and Government or BSWML appointed Third Party agency may jointly conduct inspections and testing of the Goods at Successful bidder Place before delivery to BSWML prior to issuance of the authorization for delivery by the BSWML. All costs involved in arranging and performing of such inspections and tests shall be borne by the Successful bidder (b) The Successful Bidder, BSWML shall jointly conduct final inspections and testing of the Goods after delivery to prior to acceptance of the Goods.
14	Tests and Inspections shall be carried out at the specified times or milestones, and places as specified Schedule of Supply.
15	The BSWML may require witnessing, prior to award of contract, the demonstration at any of the site where the bidder had claimed for experience. The bidder has to make necessary arrangements for such demonstration at the selected site.
16	The liquidated damage shall be: 0.01% of capital value per week of delay or part there of
17	The maximum amount of liquidated damages shall be: 10% of the capital price
18	The period of validity of the Warranty shall be: 365 days from date of completion of contract
19	The amount of aggregate liability shall be: Equal to contract price

1. Labour:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.



2. Compliance with labour regulations:

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

3. Taxes and Duties

The Item Rate Amount for which the Tender is approved shall be inclusive of all Expenses for the proper and entire Completion of the Work and shall be inclusive of all Taxes, Duties and Levies including Sales Tax, Municipal Taxes, Local Taxes, Octroi, all Royalties, Patent Rights, other Incidental Charges, etc., but inclusive of GST. The Tenderer may consider Taxes, Duties, Royalties, etc. for the Purpose of Tendering prevailing one month earlier to the Date of Submission of the Tender. Subsequent Changes affected either by Government of Karnataka or Government of India, the Employer may consider Reimbursement of such Increase in the Taxes, Duties, Royalties, etc. upon proper Certification from Appropriate Tax Authorities. Any Reduction in Taxes, Levies, Royalties, etc. either by Government of Karnataka or Government of India, the Tenderer shall reimburse difference in such reduction to the Employer.

4. The Tender Documents loaded in the e - Procurement Portal, Tender Terms arrived at during Process of Clarifications together with the Letter of Acceptance thereof, shall constitute a Binding Contract between the Successful Tenderer and the Employer and shall form the Foundation of the Rights and Obligation of both the Parties.
5. The Several Documents forming the Contract are to be taken as mutually explanatory of one another, Detailed Drawings being followed in preference to Small Scale Drawings and Figured Dimensions in preference to the Measured Ones. Special Conditions shall be followed in preference to General Conditions / Clauses of the Contract. Particular



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Specifications shall be followed in preference to General Specifications applicable to the Contract.

6. In case of Discrepancy / Inconsistency between the Description in the Scope of Works, Specifications, Nomenclature of Items and / or the Drawings, Conditions of Contract, Pre- Qualification Document and if there are Varying or Conflicting Provisions made in any Document forming Part of the Contract, the Employer shall be the Deciding Authority with regard to the Intention / Interpretation of the Document and his Decision shall be final and binding on the Contractor without any reservations.
7. The Right to carry out the Work either in Conformity with or in a Manner entirely different from the Terms of this Tender Document that may be considered most suitable before or subsequent to the Receipt of Tenders due to Exigencies of Work is reserved with the Employer.
8. Any Error in Description or any Omissions there from, shall not vitiate the Contract or release the Contractor from the Execution of the whole or any part of the Works comprised therein according to Drawings and Specifications or from any of his Obligations under the Contract.

9. Submission of Bills for Payment

- 9.1 The Intermediate Billing Schedule shall be decided and mutually agreed upon by the successful Tenderer and the Employer on the basis of the Bill of Quantities to be submitted by the successful Tenderer and shall be within Reasonable Alteration. Intermediate Payments shall be made on the Basis of Work assessed by the Employer which will be made on the basis of Quantum of total Work involved as per Intermediate Billing Schedule and Quantum of Work actually executed at a particular Point of Time (within that stage) for such items. The Decision of the Employer shall be final and binding for this Purpose.
- 9.2 The Contractor shall submit to the Employer Running Bills based on the Value of the Work completed as per the Work Order Cost less the Cumulative Amount Paid previously.
- 9.3 The Employer shall check the Contractor's Bill and determine the Value of the Work executed which shall comprise of Value of the Bill of Quantities.
- 9.4 The Employer may exclude any Item paid in a Previous Bill or reduce the Proportion of any Item Previously Paid in the Light of Later Information.
- 9.5 It shall be accepted as a Condition of the Contract that the Payment of the Final Bill of the Contractor, less the Withheld Amount and his Acceptance thereof shall constitute a Full and Absolute Release of the Employer from all further Claims by the Contractor under the Contract.



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9.6 All Bills shall be prepared by the Contractor for submission, in the Prescribed Format, which have to be procured by the Contractor and got approved by the Employer before presenting the same.

10. Change of Scope of Work

Employer reserves the rights to issue **Change of Scope** in the project extent up to $\pm 10\%$ of Contract Amount.

10.1 Employer shall issue Change of Scope

- a. Until Substantial Completion of the Project, Employer shall be entitled to issue a Change of Scope.
- b. If Employer submits to Contractor in writing a duly signed proposed Change of Scope, Contractor must respond to Employer, to the extent practicable, within thirty (30) Days with a written statement setting forth the effect, if any, which such proposed Change of Scope would have on the Contract Price, the Project Schedule, the Design Basis, the Payment Schedule, any of the Minimum Acceptance Criteria, Performance

Guarantee or Guarantee Conditions, and/or any other obligation or potential liability of Contractor hereunder (collectively or individually, the "Changed Criteria").

- c. The estimate for change of scope shall be based on the current and applicable schedule of rates at the time of issue of change of scope without any tender premium. The contractor is obligated to execute the work of change of scope at the estimate prepared as per the applicable schedule of rates at the time of issue of change of scope of work.
- d. The payment shall be made to contractor in 3 milestones for the change of scope of work, the milestone shall be mutually agreed between the employer and the contractor.
- e. The Successful bidder is obligated to execute the work of additional requirement/ change of scope of work at the estimate prepared as per the applicable schedule of rates at the time of issue of Additional of scope of work of operation and maintenance of the IT equipment's. However, BSWML/Govt reserves the right for this clause.

11. Compensation Events

11.1 The following are the Compensation Events for Time Extension only unless they are caused by the Contractor. In any case, these Compensation Events shall not entitle the Contractor to claim financially whatsoever.

- a. The Employer does not give Access to a Part of the Site as per the mutually agreed Construction Schedule between the Employer and the Contractor.
- b. The Employer orders a Delay or does not approve Drawings,



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Specifications or Instructions Required for Execution of Works on time.

- c. The Employer instructs the Contractor to uncover or to carry out Additional Tests upon work which is then found to have no Defects.
- d. The Employer gives an Instruction for dealing with an Unforeseen Condition, caused by the Employer, or Additional Work required for Safety or other Reasons.
- e. The Effect on the Contractor of any of the Employer's Risks.
- f. The Employer unreasonably delays issuing a Certificate of Completion / Scheduled Payment.
- g. Other Compensation Events listed in the Contract Data or mentioned in the Contract.

11.2 If a Compensation Event would prevent the Work being completed before the Intended Completion Date, the Intended Completion Date may be extended. The Employer shall decide whether and by how much the Intended Completion Date shall be extended.

11.3 The Contractor shall not be entitled to Compensation to the Extent that the Employer's Interests are adversely affected by the Contractor not having given Early Warning or not having cooperated with the Employer.

12. No Work shall be covered or put out of View without the Approval of the Employer or his approved Representative and the Contractor shall afford Full Opportunity for Examination of such Services before these are permanently installed or extended thereof as per Site Requirement.

13. No Accommodation is available at the Site of Work for Office, Residence, Labour, Store, Casting Yard, etc. and the Contractor has to make his own Arrangement and no Claim whatsoever on this account shall be entertained.

14. The Contractor shall make his own arrangement for the Disposal of the Debris from the Works to such Place, approved by the Employer, where the same shall not cause Nuisance and shall be acceptable to the Authorities concerned.

15. The Execution of any Items of Work where any Incidental Work is actually required but not specifically stated in the Tender Document, it is to be understood that the Amount quoted by the Contractor shall cover such Charges also and nothing extra on account of such Incidental Charges, if any, shall be paid.

16. The Contractor shall make his own arrangement at his own Cost for the Provision of Telephone Facilities at the Site of Works or at any other place.

17. The Electric Connections to be obtained for use of the Work under the Contract are subject to the following Conditions.

- a. The Contractor shall make his own arrangement for Electricity for the



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Installation & commissioning of the Items. However, the Employer will assist the Contractor to get Power from the concerned Department at the Contractor's Cost.

- b. The Employer shall in no way be Responsible for any Delay in getting the Electric Connection and no Claim on this account whatsoever, shall be entertained. It shall be clearly understood that the Contractor has to make his own Arrangement for Generators for use before the Electric Connection is made available and also to be used as a Standby Arrangement in case of Power Failure, etc. or in the case of Disconnection of Electric Supply by the concerned Department for any reason.

- 18.** No Payment will be made to the Contractor for Damage caused by Accidents or Acts of God, during the Execution of the Works and no such Claim on this account will be entertained.

19. Safety of Workers

In respect of all Labour directly or indirectly employed in the Work for the Performance of the Contractor's Part of this Agreement, the Contractor shall at his own Expense arrange for the Safety Provisions as per Indian Standard Safety Codes (Latest Edition) shown below and shall at his own Expense provide all Facilities in connection there with. In case, the Contractor fails to make Arrangement and provide Necessary Facilities as aforesaid, he shall be liable to pay Rs.1000/- per Day for each day of Delay from the Date of Notice issued to the Contractor in this regard and in addition the Employer shall be at liberty to make Arrangement and provide Facilities as aforesaid and recover the Cost incurred on that behalf from the Contractor, and no Claims whatsoever shall be entertained.

- i. IS: 3696 (Part I) Safety Code for Scaffolds and Ladders
- ii. IS: 3696 (Part II) Safety Code for Scaffolds and Ladders, Part II Ladders
- iii. IS: 3764 Safety Code for Excavation Work
- iv. IS 4081 Safety Code for Blasting and Drilling Operations
- v. IS: 4138 Safety Code for Working in Compressed Air
- vi. IS: 5121 Safety Code for Piling and other Deep Foundations
- vii. IS: 5916 Safety Code for Construction involving Use of Hot Bituminous
- viii. Materials
- ix. IS: 7293 Safety Code for Working with Construction Machinery
- x. IS: 7969 Safety Code for Storage and Handling of Building Materials
- xi. Any other Code and / or as per Directions of the Employer.

20. Delayed Payments:

The Employer shall make Payment to the Contractor under the provisions of this RFP shall be made within the period set forth therein, and if no such period is specified, within 60 (sixty) days of receiving a demand along with the necessary particulars. Unless and otherwise specified in this RFP, in the event of delay beyond such period, the Employer shall pay interest for the period of delay at the rate of 10.75% per annum (ten point seven five per cent), and recovery thereof shall be without prejudice to the rights of the contractor under this Agreement including Termination thereof.



21. First Aid

The Contractor shall maintain, at every Work Place, in a readily accessible place First Aid Appliances including an adequate supply of Sterilized Dressings, Bandages, Sterilized Cotton Wool, Eye Irritation Sterile Solution, Disposable Gloves, Ointments for Burns / Cuts, Pressure Dressings, Paper Towels, General Purpose Medicines, etc. as prescribed in the Factory Rules of the State in which the Work is being carried out. The Appliances shall be kept in good order and in large work places. They shall be placed under the charge of the Safety Officer deputed by the Contractor for this Work and the Safety Officer shall be readily available during Working Hours. In each Site Office and Location one Person, suitably trained in First Aid, shall be available at all Working Hours for the purpose of attending to emergencies.

22. Fire Precautions

The Contractor shall be responsible for supplying and maintaining adequate Fire Precaution Facilities on all the Work Sites. The following minimum Standards shall be adhered to.

- The Contractor shall ensure that specially trained personnel are available to deal with fires due to Electrical Causes, Gas Explosions, etc.
- A Good Standard of Housekeeping shall be maintained at all times on the Sites.
- No Accumulations of Rubbish shall be allowed to gather.
- Combustible Scrap and other Construction Debris shall be disposed off site on day - to - day basis. If Scrap is to be burnt on site, the burning site shall be specified and located at a distance no less than 50m from any Construction Work or any other Combustible Materials.
- Signage shall be erected at prominent positions showing the correct use of Portable First Aid Fire Extinguishers.
- Emergency Plans and Fire Evacuation Plans shall be prepared and issued. Mock Drills shall be held on a regular basis to ensure the Effectiveness of the Arrangements.

23. Fire Fighting Equipment

At various locations around the Site, clearly visible Fire Points shall be established for use in an Emergency and each Fire Point should have available as a minimum the following type of Equipment.

- Dry Powder Extinguisher.
- Water Type Extinguisher.
- Bucket of Sand.

Recharging of Fire Extinguishers and their Proper Maintenance should be ensured and as a minimum should meet Indian National Standards.

The Telephone Number of the Local Fire Brigade along with other Emergency Numbers (Hospital, Police Stations, Ambulance, etc.) shall be



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displayed at Site. Supervisors and Workmen at the Site should be trained in the Use of Fire Fighting Equipment provided at the Site.



SECTION VIII - CONTRACT FORMS

Annexure 1

Performance Security for Supply, Installation & Commissioning of Video Wall, UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office.

Invitation for Bid No.: DGM-2/BSWML/TEND/04/2025-26

Date: 06.05.2025

To,

**The Deputy General
Manager - 2 BSWML, 2nd
Floor, UNI Building,
Thimmaiah Road,
Bengaluru - 560 052**

WHEREAS [insert complete name of Successful bidder] (hereinafter "the Successful bidder agency") has undertaken, pursuant to Contract No. [Insert number] dated [insert day and month], [insert year] to supply [brief description of the Goods and Related Services] (hereinafter "the Contract").

AND WHEREAS it has been stipulated by you in the aforementioned Contract that the Successful bidder shall furnish you with a security [insert type of security] issued by a reputable guarantor for the sum specified therein as security for compliance with the Successful bidder's performance obligations in accordance with the Contract.

AND WHEREAS the undersigned [insert complete name of Guarantor], legally domiciled in [insert complete address of Guarantor], (hereinafter "the Guarantor"), have agreed to give the Successful bidder a security:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Successful bidder, up to a total of [insert currency or currencies and amount of guarantee in words and figures] and we undertake to pay you, upon your first written demand declaring the Successful bidder to be in default under the Contract, without cavil or argument, any sum or sums within the limits of [insert currency or currencies and amount of guarantee in words and figures] as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

-

This security is valid until the [insert day, month, and year]. **Name [insert complete name of person signing the Security]**

In the capacity of [insert legal capacity of person signing the Security]

Signed [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the security for and on behalf of [insert seal and complete name of Guarantor] Date [insert date of signing]



Annexure 2 - Structure and Organization

Details of organization of manufacturers / approved dealer to be submitted

1.
 - (a) Name:
 - (b) Country of incorporation:
 - (c) Address of the corporate headquarters and its branch office(s), if any, in India:
 - (d) Date of incorporation and/ or commencement of business:
2. Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Package:
3. Details of individual(s) who will serve as the point of contact/ communication for the Authority:
 - (a) Name:
 - (b) Designation:
 - (c) Company:
 - (d) Address:
 - (e) Telephone Number/mobile number:
 - (f) E-Mail Address:
 - (g) Fax Number:
4. Particulars of the Authorized Signatory of the Bidder:
 - (a) Name:
 - (b) Designation:
 - (c) Address:
 - (d) Phone Number:
 - (e) Fax Number:



Annexure 3 - Key Personnel

Details of key technical and Administrative Personnel with the applicant and those that would be assigned to the work.

A.	Details of the Board of Directors / Partners	
	a) Name of the Director / partner	
	b) Organization	
	c) Address	
	d) Remarks	
B.	Key Technical and administrative personnel / Authorized signatory	
	a) Individual's name	
	b) Qualifications	
	a) Present position of office	
	b) Professional experience and details of works carried out	
	a) Year with the applicant	
	b) How the individual would be involved in the contract	
C.	Remarks.	

Signature of the

Applicant Seal:



A. Format for Certificate of Experience:

(On the Letterhead of the Concerned Agency)

Date:

TO WHOMSOEVER IT MAY CONCERN

This is to certify that _____ (name of the Bidder(s)) has carried out the following activities as part of its services towards Supply, Installation and Commissioning of Video wall, UPS, Command Center Monitoring Software & DG Set during the period _____and _____.

This certificate is being issued to be produced before Bengaluru Solid Waste Management Limited ("BSWML"), for the "Supply, Installation & Commissioning of Video Wall , UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office."

Signature and Seal of the
Authorised Signatory of the Agency



B.Format for Banker's Certificate/ Credit Lines/Letter of Credit

ON BANKS LETTER HEAD

.....
**FORMAT OF BANKER'S CERTIFICATE/ LINE OF CREDIT LETTER
(TO BE ISSUED IN THE LETTER HEAD OF THE BANK BRANCH)**

Reference Number (Sl. No.)

Place:

Date :

To:

(Name of Address of the Beneficiary)

This is to certified that, Mr./ Mrs. (Name of the Customer) having his/ their registered/ Administrative office at Is a customer of our bank and is/ are engaged in (Name of activity). If the said customer is allotted/ awarded with (Brief details of works), we may extend the credit facilities up to Rs. Lakhs to meet his/ their working capital requirement towards the execution of the said work order as per the loan policy of the Bank.

This certificate is valid up to 3 months from the date of issue, i.e. up to dd/mm/yyyy.

Yours faithfully,

Branch Manager.



Annexure 4 - Information regarding Anti-Blacklisting -Affidavit

(On a Stamp Paper of value of Rs.100)

I, M/s.....(Single Business Entity), (the names and addresses of the registered office) hereby certify and confirm that we or any of our promoter/s / director/s are not barred by Bengaluru Solid Waste Management Limited ("BSWML") / any other entity of Government of Karnataka or blacklisted by any state government or central government / department / urban local body / agency in India from participating in bidding process, either individually as on the ____ (Bid Due Date).

We further confirm that we are aware that our Proposal for the Assignment would be liable for rejection in case any material misrepresentation is made or discovered with regard to the requirements of this RFP at any stage of the Bidding Process or thereafter during the agreement period.

Dated this Day of, 20....

Name of the Bidder

Signature of the Authorised

person

[Notary Seal and Signature]



Agreement Form

This Agreement, made on the _day of ____ 20__, between _____
[Name and Address of Employer] (hereinafter called “the Employer”) of the
one part and

_____ [Name and Address of Contractor] (hereinafter
called “the Contractor”) of the other part.

Whereas the Employer is desirous that the Contractor execute “**Supply, Installation & Commissioning of Video Wall ,UPS ,Command Center Monitoring Software &DG Set for Integrated Command and Center at Ground Floor, BSWML office.**” (hereinafter called “the Works”) and the Employer has accepted the Tender by the Contractor for the execution and completion of such Works and the remedying of any defects therein at a Contract Price of Rupees _____.

NOW THIS AGREEMENT WITNESSETH as follows.

1. In this Agreement, Words and Expression shall have the same Meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the Payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any Defects therein in conformity in all aspects with the Provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the Execution and Completion of the Works and Remedying the Defects wherein the Contract Price or such other Sum as may become payable under the Provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following Documents shall be deemed to form and be read and construed as part of this Agreement, viz.
 - i. Letter of Acceptance.
 - ii. Notice to proceed with the Works.
 - iii. Contractor’s Tender.
 - iv. Contract Data.
 - v. Conditions of Contract (including Special Conditions of Contract).
 - vi. Specifications.



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- vii. Drawings.
- viii. Financial Bid.
- ix. Minutes of Meeting of Pre-Tender Meeting



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- x. The addenda Nos (If any) and
- xi. Any other Document listed in the Contract Data as forming part of the Contract.

In witness whereof the Parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____

was hereunto affixed in the Presence

of Signed, Sealed and Delivered

by the said

in the Presence of:

Binding Signature of Employer _____

Binding Signature of Contractor _____



Annexure 5 - Additional Information

Please add any further information, which the applicant considers necessary in regard to the capabilities.

(Please give a brief a brief note indicating why the applicant considers himself eligible for prequalification for the work.)

Signature of the Applicant



SECTION IX

Performance Standards and Liquidated Damages

The Performance Standards and Corresponding Liquidated Damages is listed in the table below Liquidated Damages are over & above the non-performance deductions.

Failure to Perform the Contractual Obligations:

- I. In the event of total default / failure of the Implementing Agency in execution of the services, the Employer reserves the right to get the work executed by any other agency/ firm at the risk and cost of the defaulting implementing Agency. Decision of employer is final & binding on the implementing agency firm.
- II. In this case liquidated damages @ 0.1% of the Contract value of balance work per week of delay subject to maximum of 10% shall be levied by the authority.

Note:

1. Photographic evidence shall be with date and time stamp



SECTION X Price BID

Name of work: Supply, Installation & Commissioning of Video Wall, UPS, Command Center Monitoring Software & DG Set for Integrated Command and Center at Ground Floor, BSWML office.

S. No.	Description of work	Qty	Unit	Rate per location in Rs.	Total Amount in Rs.	
					In Figure	In Words
1	Video wall-70 inch (diagonal) Video wall with laser light source complete configuration with covered base 7 columns x 2 rows-Laser DLP based rear projection-with minimum wall native resolution of 112 Mega pixel-brightness min 2200 Lumens-IP6X dust prevention certified -light source, minimum life time of 60,000hrs at Normal and 80000 hrs at eco mode-giving less than 1400BTU/h -heat dissipation-operating condition temp-10.C-30. C, Humidity upto 80% non-condensing. Video Wall controller-Controller to control 14 video wall cubes with window 10 above platform -SSd: 480GB or higher-165GB RAM-19" Rack mount industrial chasis-2 Network port-2 network port-supporting 112 Mpx video wall resolution-20 inputs connection from operator to display controller ,OEM certification of monitor & controller from same. Wall management software-Software to enable the user to display multiple source & should support auto source detection-should support for video,RGB,DVI ,Internet explorer,softwre should save and load desktop layouts-The system should offer an interface to enable control from 3rd party devices like Creston, AMX - Software should offer 4 levels of authentication (User accounts,	1	Each	76897461/-		



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	Permission for functionality & Roles etc.-Scalable GUI to scale to any size of Video wall screen					
2	UPS-Power Rating-120kVA/120kW Input-Nominal Voltage:220/380 Vac; 230/400 Vac; 240/415 Vac Voltage Range 332 ~ 477 Vac (full load); 228 ~ 332Vac (63% ~100% load) Frequency 50/60 Hz Frequency Range 40~70 Hz Current Harmonic Distortion< 3% Power Factor> 0.99 (full load) Output-Nominal Voltage:220/380 Vac; 230/400 Vac; 240/415 Vac Power Factor 1 Voltage Regulation $\pm$ 1% Voltage Harmonic Distortion < 2%(linear load) Overload Capability $\leq$ 105%: continuous; 106% ~ $\leq$ 125%: 10 minutes; 126% ~ $\leq$ 150%: 1 minute; > 150%: 1 second Output Frequency 50/60 Hz $\pm$ 0.05 Hz Cress Factor 3:1 Short-circuit Current (RMS) 470A, 90 ms Efficiency Online Mode up to 96% ECO Mode up to 99% Battery Type SMF/ VRLA 12V Voltage $\pm$240 Vdc (default) Charge Voltage Float charge: 272$\pm$2 Vdc; Boost charge: 280$\pm$2 Vdc Total VAH Required Minimum VAH -109440 to Provide 30Mins Backup Audible Noise < 65 dBA LED & LCD LED indicators and multi-language LCD display Communication Interfaces SMART slot $\times$ 1, MINI slot $\times$ 1, Parallel port $\times$ 2, RS-232 port $\times$ 1, USB port $\times$ 1, REPO port $\times$ 1, Charger detection port $\times$ 1, Input dry contact $\times$ 2, Output dry contact $\times$ 6, External battery temperature port $\times$ 2-Power Rating 120kVA/120kW	1	Each	4864753/-		



Input Nominal Voltage 220/380 Vac; 230/400 Vac; 240/415 Vac Voltage Range 332 ~ 477 Vac (full load); 228 ~ 332Vac (63% ~100% load) Frequency 50/60 Hz Frequency Range 40~70 Hz Current Harmonic Distortion < 3% Power Factor > 0.99 (full load) Output Nominal Voltage 220/380 Vac; 230/400 Vac; 240/415 Vac Power Factor 1 Voltage Regulation $\pm 1\%$ Voltage Harmonic Distortion < 2% (linear load) Overload Capability $\leq 105\%$: continuous; 106% ~ $\leq 125\%$: 10 minutes; 126% ~ $\leq 150\%$: 1 minute; > 150%: 1 second Output Frequency 50/60 Hz ± 0.05 Hz Cress Factor 3:1 Short-circuit Current (RMS) 470A, 90 ms Efficiency Online Modeup to 96% ECO Modeup to 99% Battery Type SMF/ VRLA 12V Voltage ± 240 Vdc (default) Charge Voltage Float charge: 272 ± 2 Vdc; Boost charge: 280 ± 2 Vdc Total VAH Required Minimum VAH -109440 to Provide 30Mins Backup Audible Noise < 65 dBA LED & LCD LED indicators and multi-language LCD display					
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	Communication Interfaces SMART slot × 1, MINI slot × 1, Parallel port × 2, RS-232 port × 1, USB port × 1, REPO port × 1, Charger detection port × 1, Input dry contact × 2, Output dry contact × 6, External battery temperature port × 2					
3	Command Center Monitoring Software-The Integrated Command & Control Center Platform (ICCC) shall be an enterprise class IP-enabled application. The ICCC user interface (UI) applications shall present a unified security interface for the management, configuration, monitoring, co - relation, intelligence and reporting of various embedded systems and associated edge devices. The ICCC shall support the seamless unification of various Public Safety elements IP Video Management System (VMS), AI Based Video Analytics, Automatic Number Plate Recognition (ANPR) System, Visitor Management System, Access Control System, Variable Messaging Display (VMD), Vehicle Tracking System (VTS), Incident management, Emergency response system, under a single platform. The ICCC user interface (UI) applications shall present a unified security interface for the monitoring, co - relation, intelligence and reporting of various Embedded Systems, Sub-Systems and associated edge devices. The platform must have native failover with no dependency on external virtualized or clustered applications. Solutions with external clustering like Windows Clustering, Microsoft SQL Clustering and VMware or	1	Each	13359356 /-		



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Hyper-V etc. should not be proposed. The ICCC platform must be a true unified management experience for critical infrastructure Monitoring, simplifying control room operation and system integration, minimizing total cost of ownership, and increasing operational efficiency critical to rapid decision-making.					
The Command & Control solution should be implemented and complied to the industry open standards based Commercial-of-the-shelf (COTS) products. Platform shall be open architecture based, Highly Scalable and able to integrate multiple disparate Video Surveillance systems seamlessly on a common platform. Platform system shall provide a real time Common Operating Picture (COP) of all areas involving all agencies using a simple GUI. System should provide tool to define/create any event/rule based Standard Operating Procedure (SOP) for decision making by optimizing the time to resolution for emergency and crisis situations. Platform shall provide a dashboard functionality to manage workflows by integrating information from different agencies and systems to facilitate responsive decision making.					
The Integrated Command & Control Center Application Platform shall have a built-in ONVIF Device Discovery Tool, so that ONVIF Cameras can Directly be added to the ICCC Application Platform Graphical User Interface (GUI) Display Functions View and handle multiple alarms at one time. View multiple video windows at one time. Operators shall be able to					



	resize and move video windows. View windows in a single monitor, across multiple monitors or video walls. Access, display and manage events / alarms and related security data and information from subsystem based on priority and authority level. GIS Maps Multiple map integration including OSM, Custom Maps, Google and Bing. Ability to add maps defined or given by customer. Each map should support multiple layers or hierarchy of Base Layer and Overlay layer. Execute Query on layers and export the results. Should support Geo Server Finding Shortest path/Best Route between 2 GPS location. Measure distance and area on a map. Supports Geo coding and reverse geo coding. View and plot devices, cameras, vehicles, sensors and field personnel based on their GPS coordinates.					
4	DG Set - Cummins make Diesel Engine with Radiator Water Cooled, turbocharged with after cooler, suitable for prime duty Generating Set application, with an output of 160 kVA/128 KW under NTP conditions of BS:5514, with an overload capacity of 10% for one hour in every 12 hours of Operation. The DG Set should be capable of voltage buildup within 15 to 20 seconds after receiving start command and it should be ready to take first step load within 15 to 20 seconds after receiving start command on voltage buildup2) DIESEL ENGINE: The total No. of Cylinders is 6 Nos In-line type.- Engine cubic capacity should not be less than 6.7 L-Electronic	1	Each	4721143/-		



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	Engine with electronic fuel injection system-Radiator with blower fan -Corrosion inhibitor / liquid coolant Spin-on filters-fuel & lube oil -Flywheel housing and flywheel to suit single bearing alternator Dry type and replaceable paper element air cleaner with restriction indicator Standard integral set-mounted radiator system, designed and tested for 50°C ambient temperature Optimized turbocharger for increase altitude capabilities Hospital Grade silencer mounted inside acoustic enclosure Stainless steel exhaust flexible bellows Electric starters with soft start engagement features Battery charging alternator Anti-vibration mounts of reputed make. Protective guards for all rotating parts. The engine should be Full Authority electronically controlled to meet compliance with stringent emission norms & improve overall performance efficiency and reliability3) ALTERNATOR: “STAMFORD”, or approved equivalent make standard design Alternator, suitably rated at 160kVA/128kW at 0.8 PF, 415 Volts, 3 Phase, 4 wires, 50 cycles/sec., 1500 RPM, self-excited and self-regulated, with brushless excitation, Band of Voltage Regulation +/- 0.5% of rated voltage, from no load to full load, Insulation Class “H”. The Alternator generally conforms to BS:5000/IS:4722. Brushless type, Screen protected, Revolving field, Self-excited alternator conforming to IS/IEC							
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	60034-1 Better motor starting capability Best in class efficiency 6) INTEGRATED DG CONTROLLER: AMF Functionality SYNC compatible Audible & Visual warning for inducement Microprocessor based intuitive operator interface with LED backlit128X64 pixel graphic display with tactile feel soft switches. Indications - Generator set status Engine Metering: Oil pressure, Engine temperature, starting battery voltage, Engine running hours AC Alternator Metering: L-L Voltage and L-N Voltage, Current (phase and total), kVA (phase and total) and Frequency, kWh, Total & per phase (kw & kVA), PF, Utility Voltage and Freq. Engine Protection: Low lube oil pressure, High/Low coolant temperature, Battery Over/Under/Weak Volts, Fail to Crank/ Start, Sensor failure, Cranking lockout, Low fuel level. AC Alternator Protection: Over/Under Voltage, Over/Under Frequency, Loss of AC sensing. Overspeed, Over Current, kW overload Data Logging: Engine hours, Control hours and up to 5 recent fault codes Configurable glow plug control 12/24 Volt DC operation Sleep mode Modbus interface (RS485 RTU) Certifications - meets the requirement of relevant ISO, EN, Mil Std. and CE standards Maintenance due alarm based on Engine Run Time and due date Fuel and DEF level visual Display Exerciser scheduler									
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	The manufacturing of the integrated controller should rest with the engine manufacturer to guarantee optimal integration and for better reliability							
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Note:

The prices are inclusive of all taxes, transit charges & Excluding GST

(In case of discrepancy between unit price and total price, lowest price will prevail)

Signature of Applicant

..... Name and

address: